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TOP OF OHIO

PLANNING FOR THE FUTURE



CHAMPAIGN, LOGAN, UNION COUNTIES
Resource Conservation and Development Project



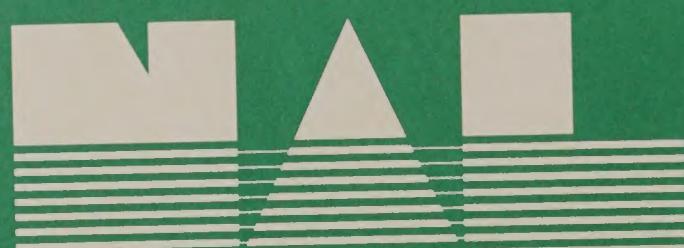
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TOP OF OHIO
RESOURCE CONSERVATION AND DEVELOPMENT
PROJECT PLAN

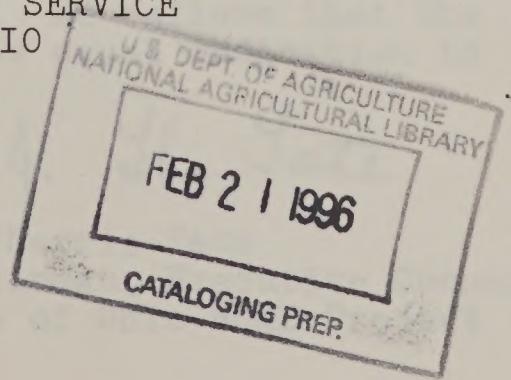
Sponsored and Prepared by:
SOIL AND WATER CONSERVATION DISTRICTS
and
COUNTY COMMISSIONERS
of
CHAMPAIGN, LOGAN, UNION COUNTIES

Assisted by U. S. Department of Agriculture,
Soil Conservation Service, and
Other Cooperating Agencies

Prepared under the Authority of the Food and
Agriculture Act of 1962, U. S. Congress
(Public Law 87-703)

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLUMBUS, OHIO

JULY, 1975



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TOP OF OHIO

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FOREWORD

RESOURCE
CONSERVATION
&
DEVELOPMENT

This Plan of Action of the Top of Ohio Resource Conservation and Development Project is offered as an expression of the needs, the hopes, and the expectations of the people of Champaign, Logan, and Union Counties. It is a guide to aid interested citizens in cooperative efforts to enhance the quality of our own lives and to preserve our heritage for those that follow.

Almost daily, we are reminded that we are rushing into a future that will make great demands on all of our resources. These demands dictate that we assess our strengths and weaknesses and waste no time in charting a course that will develop our potentials to the fullest.

The plan is the product of the efforts of many people with diverse backgrounds. With common aims, each contributed in his own way in the hope that no significant factor has been overlooked. The very process of developing the plan through the joint efforts of concerned citizens gives a strong indication of its ultimate success.

Some of the participants, in the act of planning, have found clues to solutions of community problems and have already initiated remedial actions. It is our belief that efforts to help the citizens help themselves, insofar as possible by homegrown solutions, is a proper way to generate community spirit. This spirit will make it easier to find answers to future problems as they arise. To this end, the broad base of citizen participation has been encouraged and will be expanded as the RC&D plan goes into action.

Sincere appreciation is expressed to those whose work has gone into the plan. This includes an ever expanding number of Resource Committee and Executive Council members, county and local officials, and representatives of state and federal agencies. They are seeking results by cooperation, rather than individual credit and recognition. Be it known, however, that these people are providing the heart, soul, and sinew to bring this Plan of Action into being. We believe that the citizens of Top of Ohio RC&D will show equal dedication in their service to the region.

J. H. Tate
J. Harris Tate
Chairman, Executive Council
Top of Ohio RC&D Project

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GLOSSARY

RC&D Resource Conservation and Development. The RC&D program is based on the concept of broad resource planning on a multi-county basis. RC&D projects are locally sponsored and directed for the purpose of land conservation and utilization. RC&D activities are directed toward improving the economy and quality of living for the citizens of the RC&D project area.

EXECUTIVE COUNCIL An appointed formal organization established by the RC&D Project Sponsors to represent them in coordinating and guiding the RC&D project.

MEASURE Activities adopted by the Executive Council for accomplishing project objectives. The Executive Council and Measure Sponsors make commitments to move measures toward completion. Some measures involve the use of RC&D funds for technical and/or financial assistance. These particular measures must be sponsored by public bodies or public non-profit organizations having the authority to install, operate, and maintain planned works of improvement.

MEASURE PLAN A specific plan for an eligible area. A measure plan is required where RC&D technical and/or financial assistance is involved.

MEASURE PROPOSAL A proposal submitted to the Executive Council as a possible action for meeting project objectives.

PROJECT PLAN The framework resource plan developed by local people for the project. The plan contains objectives, policies, priorities, course of action, and measures based on studies of the resources of the area. The plan is open ended and will be supplemented annually.

PROJECT SPONSORS Units of government having authority to join and cooperate with others in sponsoring, developing, and implementing a multi-county resource plan.

RESOURCE COMMITTEES Committees created by the Executive Council for the purpose of representing citizens of the area by evaluating needs and recommending a course of action. The resource committees assist citizens, the Executive Council, and measure sponsors in preparing and implementing plans.

SOIL AND WATER CONSERVATION DISTRICT A subdivision of state government, locally organized, for the purpose of developing and carrying out a program of wise use and development of soil, water, and related resource conservation. In Ohio, Soil and Water Conservation Districts are organized within each county and governed by a five member Board of Supervisors.

COMPREHENSIVE PLAN A statement by an appropriate agency of government, in words and graphics, describing how an area should be developed in the short and long-range future. The plan is based on the social and economic needs of people. It expresses goals and policies which are translated into a general, coordinated plan for land use, transportation, public facilities, and services.

FUNCTIONAL PLAN A plan prepared in greater detail for a component part of a comprehensive plan.

SUMMARY OF PLAN

The Top of Ohio Resource Conservation and Development Project area includes 855,040 acres and approximately 90,000 people in the west-central Ohio counties of Champaign, Logan, and Union. The project is sponsored by the Boards of Supervisors of the three Soil and Water Conservation Districts and the three Boards of County Commissioners.

The sponsoring boards have appointed an Executive Council to represent them in providing local leadership for the project. Three Resource Committees assist the Executive Council with planning and implementing the program.

The project plan is an open-ended and flexible action plan focused on natural resources. The basic RC&D concept that local people working together can identify and evaluate their needs and activate solutions is woven throughout the Plan of Action.

The objectives of the sponsors emphasize planning, promoting, and implementing conservation and development of natural resources for improving the environment, economy, and quality of living in the project area. The objectives are also directed toward motivating local citizens to activate solutions that reduce conflicts and misuses of natural resources.

The project objectives establish the base for the Executive Council and Resource Committees to set forth policies, priorities, and course of action for implementing the Plan of Action.

Fifty-two RC&D measures have been included in the project plan. The plan framework is designed to accommodate additional project measures for a wide range of natural resource developments.

The primary attention of the RC&D project will be centered on land, water, agriculture, forestry, wildlife, recreation, and tourism. Existing conditions, problems and needs, and proposed actions and possible solutions are presented for use as guidelines in determining future actions. The Logan-Union-Champaign Regional Planning Commission is assuming primary responsibility for planning industrial and urban development, community facilities, transportation, communications, and human resources.

Land and water are basic to the economy, well-being, and life style within the area. These basic resources are being pressured at an increasingly rapid rate. Approximately 86% of the land area is presently devoted to agriculture. In general, the project area has had a continuous modest population growth for many decades, but some parts of the area are now experiencing rapid population growth due to the proximity of nearby urban areas and employment opportunities. The need for increased and coordinated planning is evident for the future wide use and protection of the natural resource base.

The implementation of project measures will be instrumental in meeting resource needs. Project measures must be submitted in writing to the Executive Council, meet objectives of the project program, and have strong local sponsorship and support.

Plans, programs, and resources of local, state, and federal organizations, and most importantly those of local citizens, will be utilized in implementing project measures.

The project plan will be reviewed and updated annually by the Executive Council to provide for a viable and continuous resource action program.

Implementation and further development of the project plan is expected to provide long-time benefits for present and future generations of the project area.

INTRODUCTION

The Top of Ohio RC&D Project was organized to help the people of the project area to manage natural resources and improve the economy, environment and quality of living.

The project had its beginning in late 1970 with informational meetings. The Boards of Supervisors of the Soil and Water Conservation Districts and the Boards of County Commissioners of Champaign, Logan, and Union Counties became the sponsors of the project. The Logan-Union-Champaign Regional Planning Commission was instrumental in assisting with the application for planning assistance submitted to the U.S.D.A. Secretary of Agriculture in early 1972. The project received planning approval in September 1972.

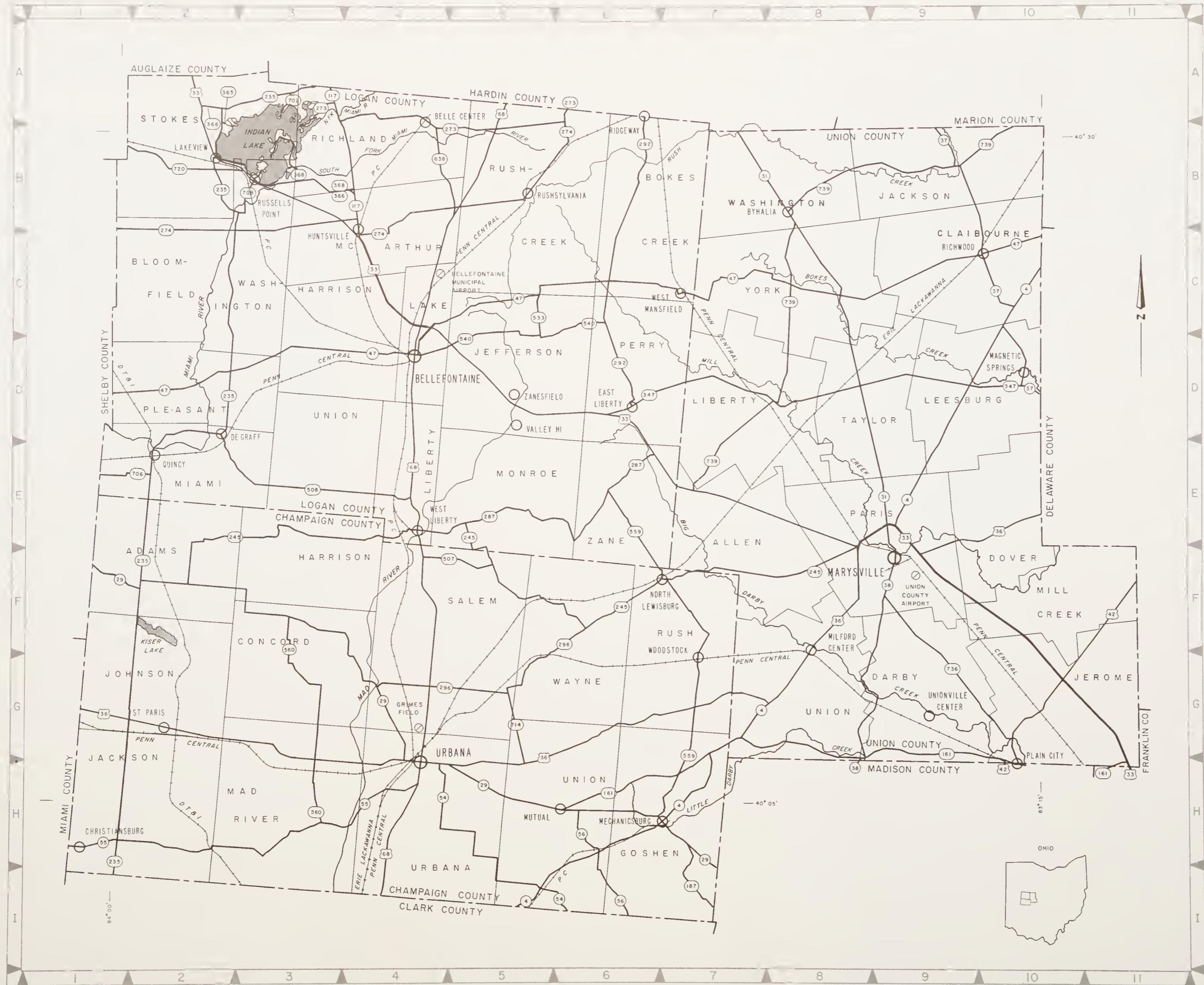
An Executive Council was established to represent the project sponsors. The Council is charged with the responsibility of guiding the development and implementation of the project plan in behalf of the sponsors and local citizens.

Resource Committees were formed by the Council to study various problems and opportunities, consider and evaluate proposals, make recommendations, and assume leadership in implementing project measures.

The plan is intended to be an open-ended framework plan which will be updated annually as needs and priorities change. The Executive Council has established objectives, policies, and a course of action. Priorities for implementing measures will be established accordingly.

The Top of Ohio RC&D Project will assume responsibility for natural resource planning in the project area. The Logan-Union-Champaign Regional Planning Commission provides planning leadership for industrial and urban development, community facilities, transportation, communications, and human resources. A close working relationship has been established between the RC&D Executive Council and the Regional Planning Commission to coordinate resource planning.

Assistance in updating and implementing the plan will be sought from any sources, public or private, which will contribute to positive resource conservation and development efforts. The Sponsors believe that RC&D project action can be the catalyst that leads to increased communications, participation, and cooperation by local people in guiding their future progress.



**TOP OF OHIO
RESOURCE CONSERVATION AND
DEVELOPMENT PROJECT**

CHAMPAIGN, LOGAN, AND UNION COUNTIES, OHIO

PLAN OF ACTION



PLANNING

THE PLAN OF ACTION PORTION OF THE PROJECT PLAN CONTAINS THE OBJECTIVES, POLICIES, PRIORITIES, AND COURSE OF ACTION.

THE PLAN OF ACTION ESTABLISHES GUIDELINES FOR IMPLEMENTING PROJECT MEASURES THAT FULFILL THE PURPOSE OF THE PROJECT.



ACTING

TEAM EFFORT IS THE KEY TO AN ACTIVE AND PROGRESSIVE RESOURCE
CONSERVATION AND DEVELOPMENT PROJECT.

INTRODUCTORY STATEMENT

The Plan of Action is a record of decisions indicating future direction and course of action for resource conservation and development. The decisions are based on needs and possible solutions identified by project resource committees and other citizens of the project area.

The Plan of Action is the most flexible part of the project plan. Knowledge is incomplete on which to base all needed decisions. The future will reflect changing needs, economics, social, and political considerations. These and other variables demand that the Plan of Action be adaptable and establish the fact that planning must be a continuous process.

The following purposes and broad objectives of the RC&D project are the foundation of the Plan of Action:

1. Promote improvement of the total environment, including the protection of significant natural features where possible.
2. Plan and implement orderly development and wise use of natural resources.
3. Support actions that augment the economic base through the wise use of natural resources.
4. Encourage measures that improve living conditions.
5. Activate solutions for existing problems and avoid future resource conflicts and misuses.
6. Coordinate project-wide planning to assist with implementing plans adopted by citizens of the area.
7. Motivate citizens to work together to develop understandings that can be transformed into meaningful actions.

The Plan of Action consists of six major action sections:

OBJECTIVES

POLICIES

PRIORITIES

COURSE OF ACTION

RC&D MEASURES

SHORT TERM PLAN

OBJECTIVES

The purposes and broad objectives provide for planning, promoting, and implementing conservation and development of resources. These resources include but are not necessarily limited to: PEOPLE, LAND, WATER, PLANTS, ANIMALS, and MAN-MADE IMPROVEMENTS.

These purposes and broad objectives are recognized as sound and desirable goals by a growing number of citizens.

To reach these goals the Project Sponsors and Executive Council will concentrate future actions in pursuit of the following objectives:

1. Encourage and actively support comprehensive and functional planning to achieve the orderly adjustment of land use for present and future needs.
2. Give strong consideration to communities as a whole in planning.
3. Seek group decisions for the common good and use of land to assure maximum advantage to the project area.
4. Assist local governments by providing aid in the form of research, information, technical, and financial assistance.
5. Promote and encourage rational land use plans, rather than piecemeal action through confrontations and legal actions.
6. Utilize U.S.D.A. and other technical services to resolve needs. Challenge agencies to further broaden their activities in assisting with community resource planning.
7. Recognize the growing needs for using rural land for purposes other than farming.
8. Protect and manage land and water resources while encouraging optimum agricultural production.
9. Encourage more local citizens to assume increased responsibilities in guiding community developments.
10. Conserve and manage the water resources of the area to reduce flooding, increase agriculture productivity and provide adequate quantities of high quality water for domestic, agricultural, industrial, and recreational needs.
11. Accelerate land treatment to reduce excessive water runoff, soil erosion, stream pollution and flooding by increased use of sound conservation treatment programs.

12. Accelerate use of soil survey information.
13. Improve pastureland resources through needed land use conversions, revegetating former cropland and idle lands, and accelerating planned grazing systems.
14. Develop and improve forest resources to increase timber utilization, wildlife, recreation, monetary and aesthetic values.
15. Develop the recreation and tourist attraction potential through coordinated efforts of public and private interests, both within and outside the project area.
16. Improve wildlife and fish habitat and develop related recreation and economic potentials.
17. Preserve local heritage through restoration and protection of historical sites and an expanded maintenance program for points of interest.
18. Encourage and assist community development programs for the establishment and improvement of community facilities.

POLICIES

The Top of Ohio RC&D Executive Council has established the following policies for guidance in future actions:

1. Citizen involvement and local leadership will be sought and utilized.
2. All segments of the project area may make requests and proposals to the Executive Council for consideration regardless of size, scope, or complexity.
3. Future project planning will be conducted within the framework of continuous open-ended planning. The project plan will be updated annually after consideration of problems, needs, and evaluation of alternatives. The updated plan shall serve as a guide for developing Annual and Short-Term plans.
4. The Project Sponsors and the Measure Sponsors will be expected to provide the necessary leadership and decisions for planning and implementing measures they sponsor.
5. RC&D measure priorities will be recommended to the Executive Council after evaluation by the Resource Committees. Priorities will then be established by the Executive Council.
6. Planning will be promoted and coordinated with cooperating groups, agencies, and governmental units and their commissions.
7. The Boards of Supervisors of the Soil and Water Conservation Districts will be requested to provide guidance and technical assistance to implement measures involving development, and management of natural resources.
8. Representatives of governmental and private agencies will be requested to act as advisors to the Executive Council and the Resource Committees.
9. Requests for additional financial assistance will be made only when local initiative, interests, resources, and personnel are being fully utilized.
10. The Executive Council will promote the understanding that RC&D funds are not to be used in lieu of locally available funds.
11. The Executive Council will assist local governmental organizations, upon request, in formulating natural resource policies. Local governmental units using these policies as a basis for regulatory measures will be assisted, upon re-

quest, by collecting and interpreting natural resources data.

12. The Executive Council will assist the Project Sponsors in taking the initiative to further develop the RC&D program and sponsor project measures.
13. The Executive Council will pursue implementation of decisions reflected in the project plan and provide assistance for implementing measure plans.
14. The Executive Council will support actions of others that hasten the achievement of the purposes and objectives of the RC&D project.

PRIORITIES

The establishment of priorities will be guided by the objectives and policies adopted for the RC&D project. Priorities will determine the course of action to be followed and the development of short-term and long-term plans.

Project measures receiving the highest priority will meet the following criteria:

1. The measure meets a critical natural resource need and will provide community benefits.
2. The measure sponsors are ready, willing, and able to meet their obligations for planning and implementing the measure.

COURSE OF ACTION

Planning in the Top of Ohio RC&D Project will be implemented by local leadership and agency support. The Course of Action outlines appropriate procedures for pursuing identified needs and securing capabilities.

The Boards of Supervisors of the Soil and Water Conservation Districts and the Boards of County Commissioners will continue to support, lead, and guide the project to maintain the resource base, quality of the environment and to improve the quality of living.

The RC&D Executive Council will follow its by-laws to fulfill responsibilities for positive action.

The Executive Council will be the body responsible for providing overall leadership in implementing the project plan. The Council will conduct routine administrative functions for the project.

Resource Committees will function in the project area to assist with planning and guiding measure proposals.

The Council will provide guidance and support for the Resource Committees. The Council will encourage Resource Committees to solicit RC&D measure proposals needed to accomplish objectives of the project plan.

All proposals submitted to the Council will be referred to appropriate committees for evaluations and recommendations. Proposals that are non-related to the objectives of the project will be referred back to the originator of the proposal with suggestions for sources of assistance.

The Resource Committees will be assisted by local agencies and other advisors, upon request. The Resource Committees will evaluate problems, needs, and alternatives, and provide recommendations for measure proposals to the Executive Council. The Committees will actively solicit appropriate sponsors for proposed measures.

Advisors to the Executive Council and Resource Committees will be expected to advise and assist with planning and implementing resource developments, but decisions shall be made by citizens of the project area.

The flexibility of this open-ended plan provides continuous opportunities to adapt the plan to changing needs and conditions. The project plan will be evaluated at least annually. Evaluation consists of reviewing and updating purposes, objectives, policies, priorities, course of action, and project measures previously adopted.

The review and update will be used as the basis for developing annual work plans and short-term plans projected for three-year periods into the future.

A major revision of the plan will be made when significant changes show that project efforts could be considerably improved with a major revision.

RC & D MEASURES



ENVIRONMENTAL CONCERNS ARE INCLUDED IN RC&D PLANNING.



THE AREA HAS A
RICH HISTORICAL
HERITAGE WORTHY
OF PUBLICIZING
AND PRESERVING.



CONTROLLED SURFACE RUNOFF PREVENTS EROSION AND SEDIMENT DAMAGE.



WOODLAND - A VALUABLE RESOURCE



**ADEQUATE DRAINAGE IS NEEDED FOR
WISE AND PRODUCTIVE LAND USE.**

RC&D MEASURES

These measures have been adopted by the RC&D Executive Council. They cover a wide range of resource needs and improvements. Additional measures will be added as needs are recognized and sponsorship secured.

MEASURE #1	MAD RIVER and TRIBUTARIES FISHING RIGHTS
Location:	Champaign and Logan Counties
Sponsors:	RC&D Recreation and Tourism Committee, L-U-C Regional Planning Commission, Logan County Tourist Council, Logan County Commissioners, Logan SWCD
Purpose:	Prevent closing of streams to fishermen due to misunderstandings and property rights abuses. Improve the public fishing program.
Assistance Needed:	Technical, Informational, and Planning
Estimated Cost:	Undetermined
MEASURE #2	WAPATOMICA INDIAN VILLAGE RESTORATION
Location:	Monroe Twp. - Logan County
Sponsors:	RC&D Recreation and Tourism Committee, L-U-C Regional Planning Commission, Logan County Tourist Council
Purpose:	Better utilize existing state-owned property.
Assistance Needed:	Technical, Research
MEASURE #5	INVENTORY of RECREATION POTENTIALS
Location:	Project-Wide
Sponsors:	RC&D Recreation and Tourism Committee, L-U-C Regional Planning Commission, Logan County Tourist Council
Purpose:	Provide information for planning new and im- proving existing recreation facilities. Deter- mine the total recreation potential of the area.
Assistance Needed:	Technical

MEASURE #6 INVENTORY of AGRICULTURAL LAND
Location: Project-Wide
Sponsors: Logan and Union SWCD,
RC&D Agriculture and Forestry Committee,
RC&D Land and Water Committee,
L-U-C Regional Planning Commission,
Logan and Union County Commissioners
Purpose: Provide sound basis for developing land use plans.
Prevent unnecessary loss of agricultural lands to competing land uses.
Assistance Needed: Technical, Planning

MEASURE #7 SEDIMENT CONTROL STRUCTURES
Location: Champaign and Logan Counties
Sponsors: Champaign and Logan SWCD,
Champaign and Logan County Commissioners,
L-U-C Regional Planning Commission
Purpose: Develop a functional plan for reducing sediment deposits and flooding in streams in areas of unstable soils and water-moved gravel. Upper Mad River Watershed area of approximately 150 square miles is designated as first priority.
Assistance Needed: Technical, Informational
Estimated Cost: Undetermined

MEASURE #8 INVENTORY and PUBLICIZE HISTORICAL SITES
Location: Project-Wide
Sponsors: RC&D Recreation and Tourism Committee,
L-U-C Regional Planning Commission,
Logan County Tourist Council,
Champaign and Union County Commissioners
Purpose: Identify historical and architectural sites.
Assistance Needed: Technical, Financial, Research, Informational,
and Publishing.
Estimated Cost: Undetermined

MEASURE #9 FORMATION of PARK BOARDS
Location: Project-Wide, by counties, where park entities do not exist.
Sponsors: RC&D Recreation and Tourism Committee, L-U-C Regional Planning Commission, Champaign and Union SWCD, Union County Commissioners, Logan County Tourist Council
Purpose: Provide public entities for recreation planning and development in rural areas and incorporated areas that wish to join.
Assistance Needed: Technical, Informational

MEASURE #10 MIAMI RIVER STUDY
Location: Logan County
Sponsors: Logan SWCD, L-U-C Regional Planning Commission, Logan County Commissioners, Village of Lakeview
Purpose: Study the problem of flooding and land use in the upper Miami River Valley as a basis for developing resource plans.
Assistance Needed: Technical, Informational, and Planning
Estimated Cost: Undetermined

MEASURE #11 WEST LIBERTY LANDFILL CRITICAL AREA TREATMENT
Location: Liberty Twp. - Logan County
Sponsors: Village of West Liberty, Logan SWCD, L-U-C Regional Planning Commission, Logan County Commissioners
Purpose: Stabilize eroding slope of landfill. Provide alternative methods of leaf disposal.
Assistance Needed: Technical, Financial
Estimated Cost: \$3,200

MEASURE #12 INVENTORY of FOREST RESOURCES

Location: Project-Wide

Sponsors: Champaign, Logan, and Union SWCD,
RC&D Agriculture and Forestry Committee

Purpose: Inventory of land and forest resources to improve management and use of forest resources. Provide information for planning forestry management programs.

Assistance
Needed: Technical, Informational

Estimated
Cost: Undetermined

MEASURE #13 BRUSH RUN DRAINAGE IMPROVEMENT

Location: Broadway, and Taylor Twp. - Union County

Sponsors: Union SWCD,
Union County Commissioners,
Taylor Twp. Trustees,
L-U-C Regional Planning Commission

Purpose: Improve drainage and health conditions in the Broadway community.

Assistance
Needed: Technical, Financial

Estimated
Cost: Undetermined

MEASURE #14 IDENTIFY FLOOD PRONE AREAS

Location: Project-Wide

Sponsors: Champaign, Logan, and Union SWCD,
Champaign, Logan, and Union County Commissioners,
L-U-C Regional Planning Commission,
Village of West Liberty

Purpose: Adequately identify flood prone areas and potential hazards.

Assistance
Needed: Technical, Informational

Estimated
Cost: Undetermined

MEASURE #15 CONTROL of STRAY DOGS
Location: Champaign and Logan Counties
Sponsors: Logan and Union SWCD,
Champaign, Logan, and Union County Commissioners
Purpose: Prevent livestock killings.
Assistance Needed: Technical, Planning, Legal, and Informational

MEASURE #16 TRAILWAYS for RECREATION
Location: Logan and Auglaize Counties
Sponsors: RC&D Recreation and Tourism Committee,
L-U-C Regional Planning Commission,
Logan County Tourist Council,
Logan County Commissioners
Purpose: Establish a Class I Recreation Trail for bicycles,
hikers, and other uses, from Bellefontaine to
St. Marys along proposed railroad right-of-way
abandonment.
Assistance Needed: Technical, Informational
Estimated Cost: Undetermined

MEASURE #17 MECHANICSBURG TENNIS COURTS
Location: Village of Mechanicsburg - Champaign County
Sponsors: Junior Women's Tourist Group of Mechanicsburg,
Goshen Memorial Park Board,
RC&D Recreation and Tourism Committee,
L-U-C Regional Planning Commission
Purpose: Provide additional recreation facilities in
existing Community Park
Assistance Needed: Technical, Financial, and Planning
Estimated Cost: \$15,000

MEASURE #18 EXTEND HUNTING HOURS of LICENSED SHOOTING PRESERVES

Location: State-Wide

Sponsors: RC&D Recreation and Tourism Committee, Ohio Shooting Preserve and Game Breeders, Inc. Logan County Tourist Council

Purpose: Extend legalized hunting times on licensed hunting and shooting preserves.

Assistance Needed: Technical, Legislative

MEASURE #19 RECREATION SERVICES SEMINAR

Location: Project-Wide

Sponsors: RC&D Recreation and Tourism Committee, Cooperative Extension Service, L-U-C Regional Planning Commission, Logan County Tourist Council

Purpose: Improve recreation industry information for recreation facility owners and managers.

Assistance Needed: Technical, Informational, and Planning

MEASURE #20 DEVELOP a LAND USE and PLANNING GUIDE for the PROJECT AREA

Location: Project-Wide

Sponsors: Champaign, Logan, and Union County Commissioners, Champaign, Logan, and Union SWCD, L-U-C Regional Planning Commission, RC&D Land and Water Committee

Purpose: Develop a readily available concise source of inventories and information for guiding land use planning decisions.

Assistance Needed: Technical

Estimated Cost: Undetermined

MEASURE #21 IMPROVE MAINTENANCE PROGRAM in EAST FORK BUCK CREEK CONSERVANCY DISTRICT
Location: Union and Goshen Twp. - Champaign County
Sponsors: East Fork Buck Creek Conservancy District, Champaign SWCD, Champaign County Commissioners
Purpose: Develop new maintenance methods. Obtain additional means for financing maintenance costs. Amend Ohio Conservancy District Act to remove certain contracting restrictions.
Assistance Needed: Technical, Legislative
Estimated Cost: \$30,000

MEASURE #22 DEER CONTROL
Location: Project-Wide
Sponsors: L-U-C Regional Planning Commission, Union County Commissioners, Union SWCD
Purpose: Extend length of deer hunting season as a means of reducing deer population.
Assistance Needed: Technical, Legislative

MEASURE #23 TOURIST INFORMATION CENTER
Location: Bellefontaine - Logan County
Sponsors: RC&D Recreation and Tourism Committee, Bellefontaine Area Chamber of Commerce, Logan County Tourist Council, L-U-C Regional Planning Commission, Logan County Commissioners
Purpose: Promote tourism in the area
Assistance Needed: Financial, Organizational, and Promotional
Estimated Cost: Undetermined

MEASURE #24 ESTABLISH DARBY BRIDGES TRAIL
Location: Union County
Sponsors: Union SWCD,
L-U-C Regional Planning Commission,
Union County Commissioners
Purpose: Provide an adequately marked bikeway, and obtain
state designation.
Assistance
Needed: Financial, Technical
Estimated
Cost: Undetermined

MEASURE #25 BOKES CREEK CRITICAL AREA TREATMENT
Location: Union County
Sponsors: Union SWCD,
L-U-C Regional Planning Commission,
Union County Commissioners
Purpose: Remove channel obstacles and stabilize stream-
banks.
Assistance
Needed: Technical, Financial
Estimated
Cost: Undetermined

MEASURE #26 ROADSIDE EROSION INVENTORY
Location: Union County
Sponsors: Union SWCD,
Union County Commissioners,
L-U-C Regional Planning Commission
Purpose: Determine total land treatment needs along roads.
Assistance
Needed: Technical, Financial
Estimated
Cost: Undetermined

MEASURE #27 U.S. 33 CRITICAL AREA TREATMENT - UNION COUNTY
Location: Union County
Sponsors: Union SWCD,
L-U-C Regional Planning Commission,
Union County Commissioners
Purpose: Develop critical area stabilization plans to
reduce erosion damages along U.S. Route 33.
Assistance
Needed: Technical, Financial
Estimated
Cost: Undetermined

MEASURE #28 ACCELERATE DITCH MAINTENANCE PROGRAMS
Location: Union County
Sponsors: Union SWCD,
L-U-C Regional Planning Commission,
Union County Commissioners
Purpose: Improve drainage facilities in Union County.
Assistance
Needed: Technical, Informational

MEASURE #29 ESTABLISH RESOURCE MANAGEMENT LABORATORIES
Location: Logan and Union Counties
Sponsors: Logan and Union SWCD,
L-U-C Regional Planning Commission,
Union County Commissioners
Purpose: Provide facilities for teaching and demonstrating
natural resource management.
Assistance
Needed: Technical, Financial, and Informational
Estimated
Cost: Undetermined

MEASURE #30 REVISE RECREATION PROVISIONS in SUBDIVISION
REGULATIONS
Location: Union County
Sponsors: Union SWCD,
L-U-C Regional Planning Commission,
Union County Commissioners
Purpose: Provide adequate areas for outdoor recreation in
housing subdivisions.
Assistance
Needed: Technical

MEASURE #31 PROMOTE USE of SOIL SURVEY INFORMATION
Location: Project-Wide
Sponsors: Champaign, Logan, and Union SWCD,
L-U-C Regional Planning Commission,
Champaign, Logan, and Union County Commissioners
Purpose: Promote use of soils information in planning
decisions. Develop means of providing more
interpretive understanding.
Assistance
Needed: Technical, Informational

MEASURE #32 IMPROVE AGRICULTURAL LIME AVAILABILITY
Location: Project-Wide
Sponsors: Champaign SWCD,
RC&D Agriculture and Forestry Committee,
Logan County Commissioners
Purpose: Develop alternative ways of obtaining, distri-
buting, and applying agricultural lime.
Assistance
Needed: Technical

MEASURE #33 CONTROL WATERCRESS in DRAINAGE CHANNELS
Location: Champaign and Logan Counties
Sponsors: Champaign and Logan SWCD,
Champaign and Logan County Commissioners
Purpose: Research and develop approved methods for control
of watercress in drainage maintenance programs.
Assistance
Needed: Technical
Estimated
Cost: \$500

MEASURE #34 VERMIN CONTROL
Location: Project-Wide
Sponsors: Champaign and Union SWCD,
Union County Commissioners,
RC&D Agriculture and Forestry Committee
Purpose: Eliminate vermin.
Assistance
Needed: Technical, Organizational, and Informational

MEASURE #35 OBTAIN RC&D PROJECT FORESTER
Location: Project-Wide
Sponsors: Champaign, Logan, and Union SWCD,
L-U-C Regional Planning Commission,
Logan and Union County Commissioners
Purpose: Provide additional forestry technical assistance.
Assistance Needed: Financial
Estimated Cost: \$20,000

MEASURE #36 ACCELERATE TREE PLANTING PROGRAM
Location: Project-Wide
Sponsors: Champaign, Logan, and Union SWCD,
L-U-C Regional Planning Commission,
Logan and Union County Commissioners
Purpose: Plant trees to meet total resource needs at a
faster rate.
Assistance Needed: Technical, Financial, and Informational
Estimated Cost: Undetermined

MEASURE #37 ACCELERATE TIMBER STAND IMPROVEMENT
Location: Project-Wide
Sponsors: Champaign, Logan, and Union SWCD,
L-U-C Regional Planning Commission,
Union County Commissioners
Purpose: Improve quality of forest resources.
Assistance Needed: Technical, Financial, and Informational
Estimated Cost: Undetermined

MEASURE #38 TAX EQUALIZATION on WELL MANAGED WOODLANDS
Location: Project-Wide
Sponsors: Champaign, Logan, and Union SWCD,
L-U-C Regional Planning Commission,
Union County Commissioners
Purpose: Retain woodland resources by wider use of a fair
tax base for well managed woodlands.
Assistance Needed: Technical, Informational

MEASURE #39 DEVELOPMENT of QUINCY NATURE AREA PARK
Location: Village of Quincy - Logan County
Sponsors: Village of Quincy,
Riverside Board of Education,
L-U-C Regional Planning Commission,
Logan SWCD,
Logan County Commissioners
Purpose: Provide a nature study area for the youth of the
Quincy-DeGraff area and the Riverside Elementary
School at Quincy.

Assistance
Needed: Technical
Estimated
Cost: Undetermined

MEASURE #40 RECREATION and CONSERVATION TOUR
Location: Project-Wide
Sponsors: RC&D Recreation and Tourism Committee,
L-U-C Regional Planning Commission,
Logan and Union SWCD,
Logan County Tourist Council,
Logan and Union County Commissioners
Purpose: Promote tourism and recognize conservation.
Assistance
Needed: Technical
Estimated
Cost: Undetermined

MEASURE #41 BLUES CREEK CRITICAL AREA TREATMENT
Location: Union County
Sponsors: Union SWCD,
Union County Commissioners,
L-U-C Regional Planning Commission
Purpose: Remove channel obstacles and stabilize stream-
banks.
Assistance
Needed: Technical, Financial
Estimated
Cost: Undetermined

MEASURE #42 RICHWOOD STORM SEWER OUTLET
Location: Village of Richwood - Union County
Sponsors: Union SWCD,
Richwood Board of Public Affairs,
L-U-C Regional Planning Commission
Purpose: Improve drainage and health conditions.
Assistance Needed: Technical, Financial
Estimated Cost: Undetermined

MEASURE #43 ACCELERATE LOGAN COUNTY SOIL SURVEY
Location: Logan County
Sponsors: Logan SWCD,
L-U-C Regional Planning Commission
Purpose: Accelerate completion of soil survey
Assistance Needed: Technical, Financial
Estimated Cost: \$26,000

MEASURE #44 PASTURE IMPROVEMENT and UTILIZATION
Location: Champaign and Logan Counties
Sponsors: Champaign and Logan SWCD,
L-U-C Regional Planning Commission
Purpose: Improve pasture management and land use. Accelerate
conservation land treatments.
Assistance Needed: Technical, Informational, Research, and Financial

MEASURE #45 U.S. 33 CRITICAL AREA TREATMENT - LOGAN COUNTY
Location: Logan County
Sponsors: Logan SWCD,
Logan County Commissioners,
L-U-C Regional Planning Commission
Purpose: Eliminate bank erosion, improve transportation
facility land treatments, establish a demonstra-
tion area.
Assistance Needed: Technical, Financial
Estimated Cost: Undetermined

MEASURE #46 BELLE CENTER STORM SEWER OUTLET
Location: Village of Belle Center - Logan County
Sponsors: Village of Belle Center,
Richland Twp. Trustees,
L-U-C Regional Planning Commission,
Logan SWCD
Purpose: Improve drainage and health conditions in the
village and adjacent area.
Assistance
Needed: Technical, Financial
Estimated
Cost: Undetermined

MEASURE #47 STONY CREEK CRITICAL AREA STABILIZATION
Location: Union Twp. - Logan County
Sponsors: Logan SWCD,
Logan County Engineer,
L-U-C Regional Planning Commission
Purpose: Control sedimentation of Stony Creek by stabi-
lizing upper $\frac{1}{4}$ mile of the creek.
Assistance
Needed: Technical, Financial
Estimated
Cost: \$150,000

MEASURE #48 CHEROKEE MAN'S RUN STREAM BANK STABILIZATION
Location: Richland, McArthur, and Harrison Twps. -
Logan County
Sponsors: Logan SWCD,
L-U-C Regional Planning Commission
Purpose: Stabilize stream bank. Reduce sedimentation.
Assistance
Needed: Technical, Financial
Estimated
Cost: Undetermined

MEASURE #49 INDIAN LAKE DAM and S.R. 235 CRITICAL AREA TREATMENT

Location: Village of Lakeview - Logan County

Sponsors: Logan SWCD,
Village of Lakeview,
L-U-C Regional Planning Commission

Purpose: Stabilize road bank and dam

Assistance
Needed: Technical, Financial, and Legal

Estimated
Cost: Undetermined

MEASURE #50 LAKEVIEW VILLAGE STORM SYSTEM OUTLET

Location: Village of Lakeview - Logan County

Sponsors: Logan SWCD,
Village of Lakeview,
L-U-C Regional Planning Commission

Purpose: Improve drainage and develop a healthier environment

Assistance
Needed: Technical, Financial, and Legal

Estimated
Cost: Undetermined

MEASURE #51 ACCELERATE SURFACE DRAINAGE LAND TREATMENTS

Location: Champaign County

Sponsors: Champaign SWCD

Purpose: Assist landowners to recognize value of surface drainage and accelerate surface drainage land treatments.

Assistance
Needed: Informational, Educational, and Technical

MEASURE #52 WOODSTOCK LAND DRAINAGE

Location: Rush Twp. and Village of Woodstock - Champaign County

Sponsors: Champaign SWCD,
Village of Woodstock

Purpose: Improve drainage and health conditions in the Village of Woodstock

Assistance
Needed: Technical, Financial

Estimated
Cost: \$100,000

MEASURE #53 DUGAN RUN FLOOD CONTROL

Location: City of Urbana, Urbana and Salem Twp. - Champaign County

Sponsors: Champaign SWCD,
City of Urbana,
L-U-C Regional Planning Commission,
Champaign County Commissioners

Purpose: Prevent flooding and provide adequate outlet for storm drainage outlets.

Assistance
Needed: Technical, Financial, and Legal

Estimated
Cost: \$200,000

MEASURE #54 CHRISTIANSBURG FLOOD PREVENTION and DRAINAGE

Location: Village of Christiansburg and Jackson Twp. - Champaign County

Sponsors: Champaign SWCD,
Village of Christiansburg

Purpose: Prevent flooding, improve drainage outlets, and improve health conditions.

Assistance
Needed: Technical, Financial

Estimated
Cost: \$38,000

SHORT TERM PLAN

The following short-term plan identifies the measures and actions which are underway or will be started in the next three years.

The scheduled actions are subject to change as progress is made in developing detailed plans for each measure.

Economic, social, and environmental needs will be analyzed in the planning actions for each measure.

Years referred to are fiscal years.

ASCS - Agricultural Stabilization & Conservation Service
BOR - Bureau of Outdoor Recreation
CCAO - County Commissioners' Association of Ohio
CES - Cooperative Extension Service
CE - Corps of Engineers
ERS - Economic Research Service
FmHA - Farmers Home Administration
FS - Forest Service
OARDC - Ohio Agricultural Research & Development Center
ODECD - Ohio Department of Economic & Community Development
ODNR - Ohio Department of Natural Resources
ODOT - Ohio Department of Transportation
OLLC - Ohio Lake Lands Commission
PUCO - Public Utilities Commission of Ohio
SCS - Soil Conservation Service
TOHS - The Ohio Historical Society

MEASURE #1 MAD RIVER and TRIBUTARIES FISHING RIGHTS

Actions:

1976 Complete inventory and study of needs, problems, and "Cooperative Fishing Easements." Conduct public informational meetings. Expand litter abatement efforts. Start developing a plan that leads to total resource management for the Mad River area.

1977 Continue plan development and start implementing initial phases.

Assistance

Needed: Technical, informational, and planning assistance from SCS, CES, ODNR.

Estimated

Cost: Undetermined

MEASURE #2 WAPATOMICA INDIAN VILLAGE RESTORATION

Actions:

1976 Conduct information meetings with members of TOHS and the Logan County Historical Society. Research and review literary material on Wapatomica Village. Conduct on-site investigations to determine if the state-owned land is the true location of Wapatomica Village.

1977 Further steps will depend on the findings of the field investigation in 1976.

Assistance

Needed: Technical and historical research assistance by TOHS and the Logan County Historical Society to conduct field investigation and historical research.

MEASURE #5

INVENTORY of RECREATION POTENTIALS

Actions:

1976 Inventory recreation facilities and related enterprises. Start evaluating the information.

1977 Determine needs for additional recreational facilities by types. Determine needs for upgrading and expanding existing facilities.

Assistance

Needed: Resource specialists to assist with inventory and evaluation of information from Ohio State University, ODNR, ODECD, and CES.

MEASURE #7

SEDIMENT CONTROL STRUCTURES

Actions:

1976 Organize steering committee and meet with agencies. Determine responsibilities and authorities. Start inventory of Mad River Watershed area.

1977 Complete inventory and evaluation of Mad River Watershed area.

1978 Develop a comprehensive plan for the area and start development of functional water management and erosion control plans.

Assistance

Needed: Technical and informational from SCS, ODNR, FS, ASCS, BOR, and CES.

Estimated

Cost: Undetermined

MEASURE #8 INVENTORY and PUBLICIZE HISTORICAL SITES

Actions:

1976

Develop methods and organization for conducting the inventory by counties. Research existing publications and survey organizations having information on the sites.

1977

Edit and compile information from research and studies for documentation and location.

1978

Complete editing and publish material for tour guide.

Assistance

Needed:

Technical, research, informational, financial, and publishing assistance from TOHS and local historical societies.

Estimated

Cost:

Undetermined

MEASURE #9

FORMATION of PARK BOARDS

Actions:

1976

Conduct studies on formation and operation of park districts. Plan information meetings.

1977

Conduct information meetings and develop plan of action for forming park boards.

1978

Start establishment.

Assistance

Needed:

Local citizen and officials' support, legal guidance, and informational assistance from CCAO and CES.

MEASURE #11

WEST LIBERTY LANDFILL CRITICAL AREA TREATMENT

Actions:

1976

Develop an Inventory and Evaluation and plan with Village Council. Complete Measure Plan and implement.

Assistance

Needed:

Technical and financial assistance from SCS and Local Funds.

Estimated

Cost:

\$3,200

MEASURE #12 INVENTORY of FOREST RESOURCES

Actions:

1976 Conduct study of woodlands, develop a questionnaire, contact woodland owners.

1977 Publicize inventory findings, conduct planning meetings, and develop a forestry plan of action.

1978 Start implementing the forestry plan.

Assistance
Needed:

Technical and informational from ODNR and USFS.

Estimated
Cost:

Undetermined

MEASURE #13 BRUSH RUN DRAINAGE IMPROVEMENT

Actions:

1976 Complete inventory and evaluation. Present report to involved landowners. Determine plan of action. Develop Measure Plan.

1977 Implement plan.

Assistance
Needed:

Technical assistance from SCS. Cooperation from PUCO, Erie & Lackawanna R.R., and ODOT. Funding from RC&D and local.

Estimated
Cost:

Undetermined

MEASURE #15 CONTROL of STRAY DOGS

Actions:

1976 Gather information on problems, needs, existing enforcement operations and laws. Plan and conduct a workshop. Develop a plan of action.

1977 Start implementing the plan of action.

Assistance
Needed:

Planning, legal, and informational assistance from CES and enforcement agencies.

MEASURE #17 MECHANICSBURG TENNIS COURTS

Actions:

1976 Develop plan and obtain more funds.

1977 Construct tennis courts.

Assistance

Needed: Technical planning and financial assistance from CES, BOR, ODNR, and SCS.

Estimated

Cost: \$15,000

MEASURE #18 EXTEND HUNTING HOURS of LICENSED SHOOTING PRESERVES

Actions:

1976 Work with other organizations in developing and introducing legislation into the Ohio General Assembly. Solicit legislative support.

Assistance

Needed: Local support and legislative action.

MEASURE #19 RECREATION SERVICES SEMINAR

Actions:

1975 Plan and conduct the first seminar. Plan for the 1976 seminar.

1976 Conduct the second seminar.

Assistance

Needed: Information and planning assistance from CES.

MEASURE #20 DEVELOP a LAND USE and PLANNING GUIDE for the PROJECT AREA

Actions:

1975 Complete formal request to ODNR. Develop plan with ODNR for completing the study.

1976 Complete the study. Publicize the study. Start updating local plans.

1977 Continue updating plans and use information in new planning decisions.

Assistance

Needed: Technical assistance from ODNR in conducting a Land Capability Analysis Resource Study.

Estimated

Cost: To be determined by ODNR.

MEASURE #21 IMPROVE MAINTENANCE PROGRAM in EAST FORK BUCK CREEK CONSERVANCY DISTRICT

Actions:

1976

Survey main channel below structure sites to determine needs. Develop maintenance plan for channel. Start maintenance construction on the lower end of channel. Contact other conservancy districts regarding need to amend contracting provisions of the Ohio Conservancy Act.

1977

Determine priorities for additional maintenance work and further develop maintenance plans.

1978

Additional planning and implementation.

Assistance
Needed:

Technical assistance from the SCS.

Estimated
Cost:

\$30,000

MEASURE #22 DEER CONTROL

Actions:

1976

Work with ODNR, Division of Wildlife, in amending laws pertaining to deer hunting season in this area. Solicit legislative support in Ohio General Assembly.

Assistance
Needed:

Technical and legislative from ODNR.

Estimated
Cost:

None

MEASURE #23 TOURIST INFORMATION CENTER

Actions:

1976

Complete arrangements for site location, identification, financing, and staffing. Start operation.

1977

Evaluate 1976 operations and continue operation.

Assistance
Needed:

Local financial assistance, organizational and promotional assistance from ODOT, Ohio Travel Bureau, and recreation industry organizations.

Estimated
Cost:

Undetermined

MEASURE #24 ESTABLISH DARBY BRIDGES TRAIL

Actions:

1976 Develop more community support. Secure funds to mark the trail.

1977 Mark the trail and publicize.

Assistance

Needed: Financial and marking assistance from local groups and county engineer. ODNR assistance for state designation.

Estimated

Cost: Undetermined

MEASURE #25 BOKES CREEK CRITICAL AREA TREATMENT

Actions:

1976 Start inventory and evaluation.

1977 Complete inventory and evaluation. Conduct meetings with landowners.

1978 Complete Measure Plan.

Assistance

Needed: Technical assistance from SCS and ODNR. Financial assistance from local sources, RC&D funds, and State of Ohio.

Estimated

Cost: Undetermined

MEASURE #26 ROADSIDE EROSION INVENTORY

Actions:

1976 Organize inventory program and provide inventory training. Enlist 4-H clubs and FFA students to conduct the inventory.

1977 Develop a roadside treatment plan and establish demonstration areas.

1978 Treat additional areas.

Assistance

Needed: Inventory assistance from local groups. Technical and engineering assistance from SCS, and County Engineer. Financial and installation assistance from state, county, and township officials.

Estimated

Cost: Undetermined

MEASURE #27 U.S. ROUTE 33, CRITICAL AREA TREATMENT -
UNION COUNTY

Actions:

1976 Conduct detailed inventory. Meet with ODOT officials. Determine responsibilities. Start developing treatment plans.

1977 Complete treatment plans and start implementing.

1978 Complete implementation of plans.

Assistance
Needed:

Technical assistance from SCS and ODOT.
Financial assistance from ODOT and landowners.

Estimated
Cost:

Undetermined

MEASURE #30 REVISE RECREATION PROVISIONS in SUBDIVISION
REGULATIONS

Actions:

1976 Review and evaluate recreation provisions of the County Subdivision Regulations.

1977 Develop guidelines leading to amendment of the regulations and adopt them.

Assistance
Needed:

Technical resource assistance on recreation planning from CES and guidance for amending regulations from L-U-C Regional Planning Commission.

MEASURE #31 PROMOTE USE of SOIL SURVEY INFORMATION

Actions:

1976 Complete Logan County Soil Survey. Conduct meeting with county officials to promote use of soils information in Real Estate Sexennial Re-appraisals. Enlist agency support and develop publicity programs.

1977 Conduct publicity programs.

Assistance
Needed:

ODNR Division of Lands and Soils to complete field work in Logan County. Assistance in developing information program from CES and SCS.

Estimated
Cost:

Undetermined

MEASURE #32 IMPROVE AGRICULTURAL LIME AVAILABILITY

Actions:

1976 Obtain technical and research assistance.
 Evaluate needs and new information.

1977 Publicize information.

Assistance

Needed: Assistance from CES, ERS, and OARDC.

MEASURE #33 CONTROL WATERCRESS in DRAINAGE CHANNELS

Actions:

1976 Conduct study of chemicals approved for use in drainage ways. Select study sites and conduct demonstrations.

1977 Evaluate the demonstration area results. Assist local officials and others to revise maintenance programs for watercress control.

Assistance

Needed: Technical and research assistance from Ohio State University, OARDC, and Ohio Dept. of Agriculture.

Estimated

Cost: \$500 for demonstration studies.

MEASURE #34 VERMIN CONTROL

Actions:

1976 Develop educational program and organize implementation program.

1977 Start implementing the program.

Assistance

Needed: Organizational and informational assistance from CES and County Health Departments.

MEASURE #39 DEVELOPMENT of QUINCY NATURE AREA PARK

Actions:

1975

Obtain concurrence of Village Council for Land Use Inventory of area and request soil mapping. Make preliminary plans for area. Make first tree planting in spring. Start detailed planning for entire area.

1976

Complete detail plans for park and implementation.

1977

Further implement plan.

Assistance
Needed:

Technical assistance from SCS, ODNR, Division of Lands and Soil, Division of Forests and Preserves. Cooperation of local governmental units and community groups.

Estimated
Cost:

Undetermined

MEASURE #40 RECREATION and CONSERVATION TOUR

Actions:

1976

Solicit support of local organizations, agencies, and industries. Gather information and plan the tour program.

1977

Conduct tour as a Bicentennial activity.
Plan for future tours.

Assistance
Needed:

Organizational assistance from Ohio Travel Bureau, CES, and local interests.

Estimated
Cost:

Undetermined

MEASURE #42 RICHWOOD STORM SEWER OUTLET

Actions:

1976

Develop inventory and evaluation.

1977

Present report, determine plan of action, and start Measure planning.

1978

Complete Measure planning.

Assistance
Needed:

Technical assistance from SCS, Ohio EPA, and ODNR. Funding from ODNR, RC&D, and local.

Estimated
Cost:

Undetermined

MEASURE #43 ACCELERATE LOGAN COUNTY SOIL SURVEY

Actions:

1976 Complete soil survey field mapping.

Assistance

Needed: Technical assistance from ODNR, Division of Lands and Soils, and SCS. Financial assistance from ODNR, SCS, and Logan County Commissioners.

Estimated

Cost: \$26,000

MEASURE #45 U.S. Rt. 33 CRITICAL AREA TREATMENT - LOGAN COUNTY

Actions:

1976 Develop inventory and evaluation, and start Measure planning.

1977 Complete Measure planning and start implementation.

Assistance

Needed: Technical assistance from SCS and ODOT Division 7. Financial assistance from ODOT, and plant materials for demonstration from SCS.

Estimated

Cost: Undetermined

MEASURE #46 BELLE CENTER STORM SEWER OUTLET

Actions:

1976 Conduct inventory and evaluation.

1977 Determine plan of action and start Measure planning.

1978 Complete planning and start implementation.

Assistance

Needed: Technical assistance from SCS and Ohio EPA. Financial assistance from RC&D and local.

Estimated

Cost: Undetermined

MEASURE #47 STONY CREEK CRITICAL AREA STABILIZATION

Actions:

1976 Complete inventory and evaluation and develop Measure Plan.

1977 Implement plan.

Assistance Needed: Technical assistance from SCS and Logan County Engineer. Financial assistance from RC&D and local.

Estimated Cost: \$150,000

MEASURE #51 ACCELERATE SURFACE DRAINAGE LAND TREATMENTS

Actions:

1976 Develop informational program.

1977 Continue informational program and accelerate installation.

Assistance Needed: Informational, educational, and technical assistance from CES and SCS.

MEASURE #54 CHRISTIANSBURG FLOOD PREVENTION and DRAINAGE

Actions:

1976 Complete inventory and evaluation. Develop Measure Plan for West Fork Honey Creek. Start planning for storm drainage.

1977 Implement West Fork Honey Creek Measure Plan and complete planning for storm drainage.

1978 Implement storm drainage plan.

Assistance Needed: Technical assistance from Champaign County Engineer and SCS. Financial assistance from RC&D and local funds.

Estimated Cost: \$38,000

RESOURCES



INCREASING PRODUCTION FROM AGRICULTURAL LAND IS OF GROWING IMPORTANCE THROUGHOUT THE AREA.



FOREST PRODUCTS
STRENGTHEN THE
ECONOMY OF THE
PROJECT AREA.



WATER RETENTION AND SEDIMENT CONTROL IMPOUNDMENTS IMPROVE AND ADD AESTHETIC VALUE TO THE AREA.



RECREATION - A GROWING INDUSTRY FOR LOCAL PEOPLE

LOCATION AND SETTING

The Top of Ohio RC&D Project area is located in west central Ohio and includes Champaign, Logan, and Union Counties. The three-county area is situated midway and north of a line running between Dayton and Columbus and midway and slightly east of a line running between Toledo and Cincinnati.

The area is located within the glaciated Till Plain. Most of the area is nearly level to gently sloping at elevations of 950 to 1,300 feet above Mean Sea Level. In the central part of the project area, the flatter terrain gives way to pronounced slopes and higher elevations with the highest elevation in Ohio at 1,549 feet.

Approximately one-half of the area drains east and south into the Scioto River Basin and the western half drains west and south into the Miami River Basin.

The 1970 Federal Census lists 89,349 people residing in the 855,040* acre area. The three county seat cities of Bellefontaine with 11,255 population, Urbana with 11,237 population, and Marysville with 5,744 population are the only cities within the area. A breakdown of population for the 23 incorporated villages and the counties is included in Table 1.

Agriculture has been a major part of the economy and is expected to remain so, although the number of persons employed in agriculture is declining. Manufacturing, clerical, professional, technical, and recreational employees are steadily increasing in numbers. One out of five workers is presently employed outside his county of residence.

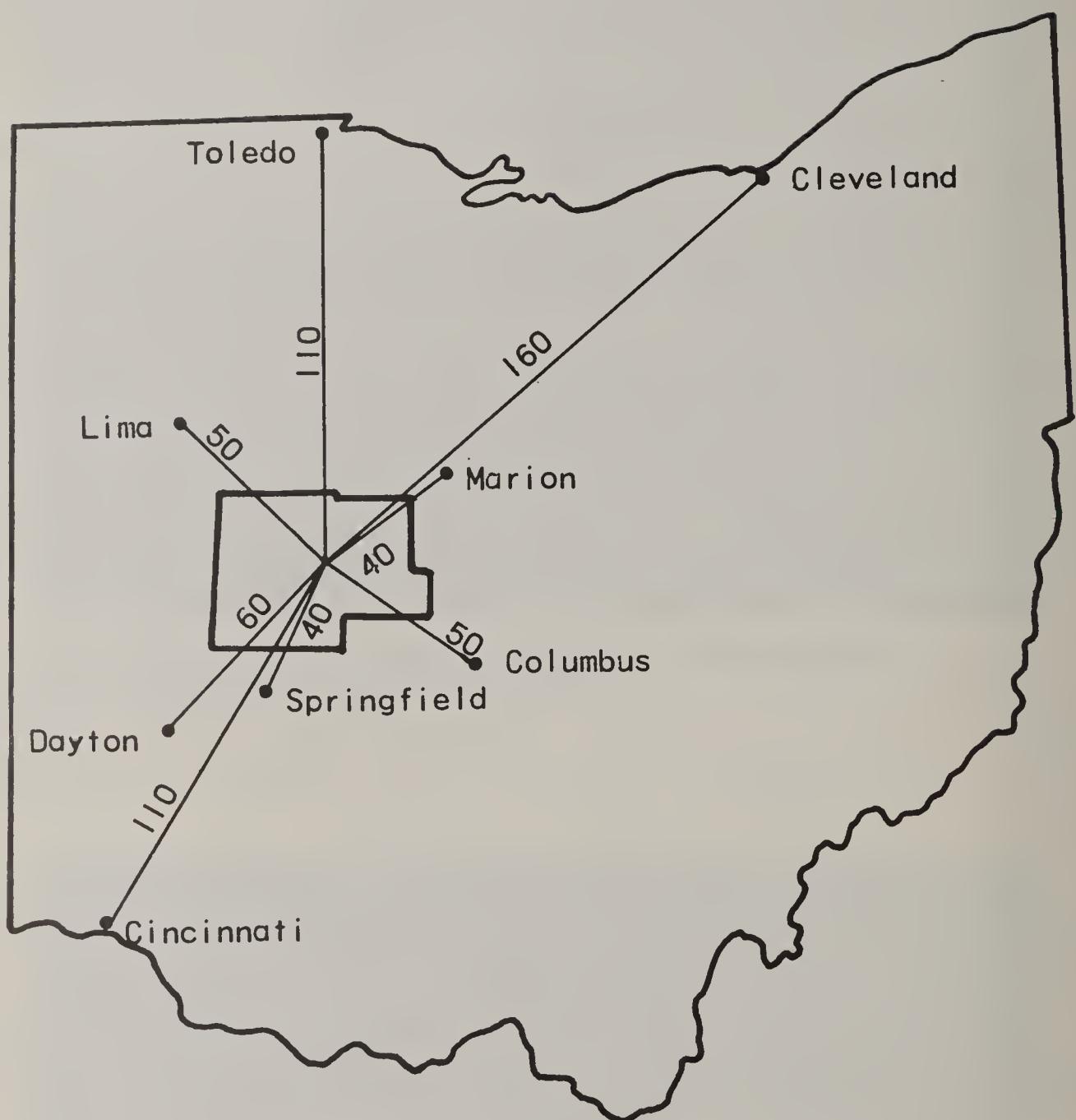
The 1973 median household incomes were \$8,158 in Champaign County, \$8,526 in Logan County, and \$8,615 in Union County. All were below the average median Ohio household income of \$9,999 and the U. S. median of \$12,629.**

The Top of Ohio RC&D Project area encompasses the same area that the Logan-Union-Champaign Regional Planning Commission serves.

*Source: "Area Measurement Reports" U. S. Dept. of Commerce, Bureau of the Census, 1967

**Source: U.S.D.A., Economic Research Service, Sales Mgt. Div.

APPROXIMATE MILEAGES FROM
TOP OF OHIO



POPULATION AND DISTRIBUTION
TABLE 1

	1970 * <u>Population</u>	** <u>Land Area</u>	<u>Population Density</u>
CHAMPAIGN COUNTY	30,491	277,120 Acres	70.4 People/ Sq. Mi.
City			
Urbana ^x	11,237		
Villages			
Christiansburg	724		
Mechanicsburg	1,686		
Mutual	177		
North Lewisburg	840		
St. Paris	1,646		
Woodstock	281		
Balance of County	13,900		
LOGAN COUNTY	35,072	300,160 Acres	74.8 People/ Sq. Mi.
City			
Bellefontaine ^x	11,255		
Villages			
Belle Center	985		
De Graff	1,117		
Huntsville	475		
Lakeview	1,026		
Quincy	686		
Ridgeway+	97		
Rushsylvania	526		
Russells Point	1,104		
Valley Hi	19		
West Liberty	1,580		
West Mansfield	753		
Zanesfield	272		
Balance of County	15,177		
UNION COUNTY	23,786	277,760 Acres	54.8 People/ Sq. Mi.
City			
Marysville ^x	5,744		
Villages			
Magnetic Springs	349		
Milford Center	753		
Plain City+	931		
Richwood	2,072		
Unionville Center	255		
Balance of County	13,682		

^x County Seats

+ Villages (additional area & population in adjoining counties)

SOURCES: * Federal Census of Population Ohio 1970

** "Area Measurement Reports" U. S. Dept. of Commerce,
Bureau of Census, September 1967

GOVERNMENTAL STRUCTURE

Various levels of government, public and quasi-public bodies, and private organizations exist within the Top of Ohio RC&D for providing services to the people. Many of the working relationships between these entities are well established by informal arrangements and tradition. Some relationships are established constitutionally and an increasing number are being mandated by legislation.

LOCAL GOVERNMENTS

The principal local governmental units existing in the project area are 3 counties, 43 townships, and 26 cities and villages. These entities are governed by elected representatives of the people. Their powers and authorities are granted by the State Constitution and Acts of the Ohio General Assembly.

A number of commissions and boards have been created by county commissioners, which are responsible to them. Welfare, libraries, health, and planning are typical functions assigned to such bodies. Other typical services provided by county governments include police protection, local tax collection and disbursement, transportation, and public records.

A few relatively autonomous, special-purpose bodies operate at the county level or within parts of the counties. Typical of these are soil and water conservation districts, school boards, and the East Fork Buck Creek Conservancy District in Champaign County. The governing boards of such bodies are elected for some and court appointed for others.

Typical services provided by townships include transportation, cemetery operations, fire protection, zoning, police protection, and recreation. Throughout the Top of Ohio RC&D Project area the types and amounts of services provided by townships are varied.

Municipal governments within the project area are of the mayor-council form. The three cities have some varied powers and authorities compared to the 23 villages as granted by the Ohio Revised Code. The municipal bodies have also created a number of boards and commissions to assist with municipal services. Typical services provided by municipal bodies include fire and police protection, waste disposal, transportation, recreation, planning, and zoning. In the Top of Ohio area the number and extent of services provided by municipal bodies is varied.

A number of private, public non-profit, and volunteer organizations supplement local services with civic improvement projects and activities. Typical services provided are fire and rescue services. The types and extent of services vary throughout the RC&D area.

STATE GOVERNMENT

The State of Ohio provides many services to the people of the Top of Ohio area. A few of the services are provided by independent operations. However, the services are generally supportive and supplementary to local governmental operations.

FEDERAL GOVERNMENT

Federal government services within the area are generally provided in the form of assistance programs to state and local governments and direct assistance to citizens.

THE TOP OF OHIO RC&D EXECUTIVE COUNCIL

The County Commissioners and the Soil and Water Conservation District Boards of Supervisors sponsor the Top of Ohio RC&D Project in behalf of all the people of the area. The Executive Council is made up of appointed representatives. The Council views its task as cooperatively dealing with the concerns of resource conservation and development. Policies, priorities, and actions of the Council, which it plans to execute, are sponsored by entities responsible for such activities. The Council provides coordination needed to obtain assistance for implementing plans of the Sponsors, various entities, and citizens. The Council provides a forum in which experiences and ideas may be exchanged for the benefit of the citizens within the area.

CLIMATE

The climate of the Top of Ohio RC&D area is classified as continental. It is marked by large annual, daily, and day-to-day ranges of temperature. Summers are moderately warm and humid with occasional days warmer than 90°. The winters are reasonably cool and cloudy. Weather changes occur every few days with the arrival of cold or warm fronts and their associated high and low pressure centers.

Total annual precipitation varies from year to year but is normally abundant and well distributed throughout the year. Thunderstorms occur on an average of 40 days each year and mostly during the May-August period. Hailstorms occur on an average of three or four times per year and fogs lowering visibility to less than one-fourth mile average 10 days per year. Extended damaging dry periods are infrequent.

Prevailing winds are generally southerly to southwesterly and average velocity is 7-8 m.p.h. in summer and 10-11 m.p.h. in winter.

In general, the climate is favorable for diversified agriculture. The combination of favorable climate and generally productive soils, provide a base for high agricultural productivity. This is a great economic asset for the Top of Ohio area.

The climate is generally favorable to outdoor recreation. However, winter sports needing snow and ice are subject to good and poor seasons due to the wide annual variations in snowfall and temperature.

<u>Climatic Data</u>	<u>Bellefontaine</u>	<u>Marysville</u>	<u>Urbana</u>
Mean Fahrenheit Temp.			
Annual	50.9°	50.4°	50.8°
January	27.3°	27.2°	27.8°
July	73.1°	72.6°	72.9°
Av. in. Annual Rainfall	35.75"	36.58"	37.53"
Av. in. Annual Snowfall	23.6"	25.5"	23.0"
Av. days Growing Season	165 da.	158 da.	161 da.
Av. days Sub-Zero Temp.	4 da.	4 da.	4 da.
Earliest freeze dates	Sept 18	Sept 21	Sept 13
Latest freeze dates	May 27	May 27	May 23
Highest Temperature	106°	109°	110°
Lowest Temperature	- 20°	- 20°	- 20°

SOURCE: Data from U. S. Dept. of Commerce, Environmental Science Services Administration, based on records for the period 1935-1966.

SOILS

The RC&D project area lies entirely in the Wisconsin glaciated region of Ohio. Most of the soils have formed in calcareous glacial materials or their alluvium. Soils differ from one another and each has a unique set of characteristics. The behavior of each individual soil is dictated by its own set of characteristics. A knowledge of soils, their characteristics and limitations should be considered in site selection for residential, industrial, highway, and recreational developments. The production of farm crops, pasture, and woodland products is influenced by the physical and chemical properties of the soil.

Soil surveys carried out as a part of the National Cooperative Soil Survey have been completed for Champaign and Union Counties. A Soil Survey is published for Champaign County and is in preparation for Union County. The Logan County detailed survey is currently in progress and field work will be completed in 1975. With this much detailed knowledge of the soils available and where they occur, it is possible to make a general soil map of the project area that shows the main patterns of soil. These patterns of soil are called soil associations.

The accompanying soil map shows, in color, the location, extent and distribution of the 13 soil associations or general soil areas that are in the RC&D project area. A soil association is a group of defined and named soils occurring together in a distinct, geographic landscape pattern. Each association normally consists of two or three extensive soils for which it is named. The soils in one association may occur in another, but in a different pattern.

Twenty-two soil series are listed in the soil associations, in some cases more than once. However, it should be noted that in the RC&D project area there are over fifty known soils, which when separated by surface textures and slope and erosion differences, result in over one hundred twenty-five different soil mapping units as shown on detailed soil survey maps.

By knowing the soil series and the percentages of each that make up the soil association, interpretations can be made for planning large areas from the general soil map. These interpretations are given in Table 1, Page 59. Comparisons can also be made among the soil associations for any particular planning. The estimated degree and kinds of limitations of soils for some selected land uses are shown. This information can help in the selection of alternatives that can be the basis for long-range planning.

The limitations of the soils in the RC&D project area for specified land uses are rated slight, moderate, or severe. If the limitations are rated moderate or severe, the chief limitations for the intended uses are listed. A rating of slight

indicates that the soil has no important limitation for the specified use. A moderate rating indicates that the soil has some limitations for the specified use. These limitations need to be recognized, but they can be overcome or corrected. A rating of severe indicates that the soil has serious problems for specified use and these limitations will be difficult and costly to overcome. A rating of severe does not mean that the soil cannot be used for the specific use. It does mean that proper designs must be made, and very intensive measures must be taken to overcome the limitation(s). Also a severe rating could provide a basis for the selection of alternative sites, with a less restrictive rating.

Following is a brief discussion of each column in Table 1.

Soil Associations and Percent of Project Area: The percentage of each soil association of the project area and the dominant soils within the association are given. The soils are listed in order of their importance.

Percent of Association: These are the estimated percentages of the dominant soils within the association.

Percent of Slope: These percentages indicate the dominant range of slope on which the soils commonly occur.

Natural Soil Drainage: This refers to the drainage condition which existed during the development of the soil, as opposed to altered or artificial drainage such as surface drains, tiling, or tillage operations. These installed artificial drainage systems will modify the natural soil drainage, but with failure of such installed drainage systems, the soils will revert to their original natural state.

Parent Material: This refers to the material from which the soil formed. Usually the unaltered parent material is at a depth of two to three feet or more below the surface.

Erosion Hazard: This is a rating of the potential for water erosion. Soil features and properties that influence the erodibility of soil are: slope, soil texture, soil structure and its stability, and soil permeability.

Local Roads and Streets: This column rates the use of soils for roads and streets where traffic is not continually heavy. Soil characteristics considered in the ratings are: soil drainage, seasonal wetness, slope, shrink-swell potential, susceptibility to frost heaving, and flooding hazard.

Sewage Disposal Absorption Fields: Soil properties important to the installation and operation of septic tanks and other sewage disposal systems with disposal fields include permeability, slope, natural drainage, seasonal water table level, flooding hazard, and surface ponding. Some soils in some

associations are underlain by sand and gravel through which the effluent, that is inadequately filtered, can contaminate ground water or nearby springs, streams, lakes, or ponds. Before a system is installed, an investigation should be made at the proposed site to determine the limitations of the soil and other related site factors.

Dwellings with or without Basements: The soils are rated for homes of three stories or less, but the ratings also apply to sites for small industrial, commercial, and institutional buildings.

Soil properties and features that are used to make the ratings are slope, natural drainage, seasonal wetness, shrink-swell potential, and hazards of flooding or ponding. Sewage disposal is not considered in the dwellings column.

Intensive Use Recreation Areas: This column applies to soils considered for intensive uses such as park-type picnic areas and playgrounds.

Soil properties and features that are used in making the ratings are soil wetness, slope, surface soil texture, flooding, and surface ponding.

Landscaping: Among the soil properties that determine whether good lawns, golf fairways, and other landscaping can be established are soil wetness, slope, flooding hazard, and drought hazard.

Farming: This column applies to soils considered for cultivated crop use. The ratings are based on hazards to cropping such as slope, erosion, wetness, flooding, and droughtiness.

Pasture: This column applies to permanent-type pasture and usually only small areas of the more sloping topography are used for this purpose. Most of the pasture for livestock is meadow or hayland within a cultivated cropping rotation.

The ratings are based on the hazards imposed by soil wetness, flooding, and droughtiness. The seasonal wet soils on the flood plains often have the best potential for pasture use because of the limitations for other uses.

Woodland Suitability: The soils have been rated for woodland use. Tree production is practiced on a limited acreage of the project area. Tree species are predominantly native hardwoods.

The soil features affecting woodland suitability are seasonal wetness, depth of root zone, soil textures, and steepness of slope.

SOIL ASSOCIATIONS

DOMINANTLY SOILS FORMED IN MODERATELY-FINE TEXTURED GLACIAL DEPOSITS ON TILL PLAINS AND MORAINES

1. Blount-Wetzel-Pewamo association: Somewhat poorly drained, poorly drained, and very poorly drained, level and gently sloping soils
2. Blount-Morley-Pewamo association: Somewhat poorly drained, moderately well drained, and very poorly drained, level to moderately steep soils

DOMINANTLY SOILS FORMED IN MEDIUM TEXTURED GLACIAL DEPOSITS ON TILL PLAINS, MORAINES AND KAMES

3. Brookston-Crosby association: Very poorly drained and somewhat poorly drained, level and gently sloping soils
4. Crosby-Brookston-Celina association: Somewhat poorly drained, very poorly drained and moderately well drained, level and gently sloping soils
5. Miamian-Celina-Brookston association: Well drained, moderately well drained and very poorly drained, level to steep soils
6. Miamian association: Well drained, strongly sloping to steep soils
7. Miamian-Eldean association: Well drained, gently sloping to moderately steep soils

DOMINANTLY SOILS FORMED IN FINE TEXTURED GLACIAL DEPOSITS ON TILL PLAINS AND MORAINES

8. Nappanee-Paulding-St. Clair association: Somewhat poorly drained, very poorly drained, and moderately well drained, level to sloping soils

DOMINANTLY SOILS FORMED IN MODERATELY-FINE AND FINE TEXTURED GLACIAL DEPOSITS ON LAKEBEDS AND OUTWASH TERRACES

9. Latty-Fulton-Patton association: Very poorly drained and somewhat poorly drained, level to gently sloping soils
10. Montgomery-Eldean association: Very poorly drained and well drained, level to sloping soils
11. Eldean-Lippincott association: Well drained and very poorly drained, level to strongly sloping soils

DOMINANTLY SOILS FORMED IN MEDIUM AND MODERATELY-FINE TEXTURED DEPOSITS ON FLOOD PLAINS AND OUTWASH TERRACES

12. Genesee-Eel-Shoals-Eldean association: Well drained, moderately well drained, and somewhat poorly drained, level to gently sloping soils
13. Sloan-Latty overwash association: Very poorly drained, nearly level and level soils

Each area outlined on the General Soil map consists of more than one kind of soil. The map is thus meant for general planning rather than a basis for decisions on the use of specific tracts.

SOILS TABLE I

MAP SYMBOL	SOIL ASSOCIATIONS AND PERCENT OF PROJECT AREA	PERCENT OF ASSOCIATION B/	PROPERTIES OF THE SOILS					DEGREE AND KINDS OF LIMITATIONS OF SOILS FOR SPECIFIED LAND USES							WOODLAND SUITABILITY
			PERCENT OF SLOPE	NATURAL SOIL DRAINAGE	PARENT MATERIAL	EROSION HAZARD	LOCAL ROADS AND STREETS	SEPTIC TANK ABSORPTION FIELDS	DWELLINGS WITHOUT BASEMENTS	DWELLINGS WITH BASEMENTS	INTENSIVE USE RECREATION	LANDSCAPING	FARMING (CULTIVATED CROPS)	PASTURE	
1	Blount-Wetzel-Pewamo Association 21%	65	0-6	Somewhat poorly	Clay loam glacial till	Moderate	Moderate, 3	Severe, 1, 3	Moderate, 3	Severe, 3	Moderate, 3	Moderate, 3	Slight	Slight	Fair Good Good
		18	0-1	Very poorly	Clay loam glacial till	Slight	Severe, 3	Severe, 3, 4	Severe, 3	Severe, 3	Severe, 3	Severe, 3	Slight	Slight	
		13	0-1	Very poorly	Clay loam glacial till	Slight	Severe, 3	Severe, 3, 4	Severe, 3	Severe, 3	Severe, 3, 4	Severe, 3	Slight	Slight	
2	Blount-Morley-Pewamo Association 13%	50	0-6	Somewhat poorly	Clay loam glacial till	Moderate	Moderate, 3	Severe, 1, 3	Moderate, 3	Severe, 3	Moderate, 3	Moderate, 3	Slight	Slight	Fair Good Good
		34	2-18	Moderately well	Clay loam glacial till	Moderate-severe	Moderate to severe, 6, 7	Severe, 1, 6	Slight to moderate, 6	Moderate, 3, 6	Slight to severe, 6	Slight to severe, 6	Slight	Slight	
		14	0-1	Very poorly	Clay loam glacial till	Slight	Severe, 3	Severe, 3, 4	Severe, 3	Severe, 3	Severe, 3, 4	Severe, 3	Slight	Slight	
3	Brookston-Crosby Association 8%	54	0-1	Very poorly	Loam glacial till	Slight	Severe, 3	Severe, 3, 4	Severe, 3	Severe, 3	Severe, 3, 4	Severe, 3	Slight	Slight	Good Fair
		30	0-6	Somewhat poorly	Loam glacial till	Moderate	Moderate, 3	Severe, 3	Moderate, 3	Severe, 3	Moderate, 3	Moderate, 3	Slight	Slight	
4	Crosby-Brookston-Celina Association 10%	50	0-6	Somewhat poorly	Loam glacial till	Moderate	Moderate, 3	Severe, 3	Moderate, 3	Severe, 3	Moderate, 3	Moderate, 3	Slight	Slight	Fair Good Good
		20	0-2	Very poorly	Loam glacial till	Slight	Severe, 3	Severe, 3, 4	Severe, 3	Severe, 3	Severe, 3	Severe, 3	Slight	Slight	
		15	2-6	Moderately well	Loam glacial till	Moderate	Moderate, 7	Severe, 1	Slight	Moderate, 3	Moderate, 3	Moderate, 3	Slight	Slight	
5	Miamian-Celina-Brookston Association 17%	50	6-25	Well	Loam glacial till	Moderate-severe	Moderate to severe, 6, 7	Severe, 1, 6	Moderate to severe, 6	Moderate to severe, 6	Moderate to severe, 6	Moderate to severe, 6	Slight	Slight	Good
		12	2-6	Moderately well	Loam glacial till	Moderate	Moderate, 7	Severe, 1	Slight	Moderate, 3	Moderate, 3	Moderate, 3	Slight	Slight	
		10	0-2	Very poorly	Loam glacial till	Slight	Severe, 3	Severe, 3, 4	Severe, 3	Severe, 3	Severe, 3	Severe, 3	Slight	Slight	
6	Miamian Association 2%	70	18-35	Well	Loam glacial till	Severe	Severe, 6	Severe, 1, 6	Severe, 6	Severe, 6	Severe, 6	Severe, 6	Severe, 6	Severe, 6	Good
7	Miamian-Eldean Association 5%	40	2-25	Well	Loam glacial till	Moderate-severe	Moderate to severe, 6, 7	Severe, 1, 6	Slight to severe, 6	Slight to severe, 6	Slight to severe, 6	Slight to severe, 6	Slight to severe, 6	Slight	Good
		25	2-12	Well	Loamy outwash over sand and gravel	Moderate	Slight to moderate, 6	Slight A to moderate, 6	Slight to moderate, 6	Slight to moderate, 6	Slight to moderate, 6	Slight to moderate, 6	Slight to moderate, 6	Slight	
8	Nappanee-Paulding-St. Clair Association 9%	50	0-6	Somewhat poorly	Clayey glacial till	Moderate	Moderate, 3	Severe, 1, 3	Moderate, 3	Severe, 3	Moderate, 3	Moderate, 3	Slight	Slight	Fair Fair Fair
		25	0-1	Very poorly	Clayey deposits	Slight	Severe, 1, 3	Severe, 3, 4	Severe, 3	Severe, 3	Severe, 3	Severe, 3	Moderate, 3	Moderate, 3	
		20	2-12	Moderately well	Clayey glacial till	Moderate-severe	Moderate, 6, 7	Severe, 1	Slight to moderate, 6	Moderate, 3	Slight to moderate, 6	Slight to moderate, 6	Slight to moderate, 6	Slight	Slight
9	Latty-Fulton-Patton Association 1%	40	0-1	Very poorly	Clayey lake deposits	Slight	Severe, 3	Severe, 3, 4	Severe, 3	Severe, 3	Severe, 3, 4	Severe, 3	Moderate, 3	Moderate, 3	Fair Good Good
		20	0-6	Somewhat poorly	Clayey lake deposits	Moderate	Moderate, 3	Severe, 1	Moderate, 3	Severe, 3	Moderate, 3	Moderate, 3	Slight	Slight	
		10	0-1	Very poorly	Silty lake deposits	Slight	Severe, 3	Severe, 3, 4	Severe, 3	Severe, 3	Severe, 3, 4	Severe, 3	Slight	Slight	
10	Montgomery-Eldean Association 3%	40	0-1	Very poorly	Clayey lake deposits	Slight	Severe, 3	Severe, 3, 4	Severe, 3	Severe, 3	Severe, 3, 4	Severe, 3	Moderate, 3	Moderate, 3	Fair Good
		30	0-18	Well	Loamy outwash over sand and gravel	Slight-moderate	Slight to severe, 6	Slight A to severe, 6	Slight to moderate, 6	Slight to moderate, 6	Slight to severe, 6	Slight to severe, 6	Slight to severe, 6	Slight to moderate, 8	
11	Eldean-Lippincott Association 9%	50	0-18	Well	Loamy outwash over sand and gravel	Slight-moderate	Slight to severe, 6	Slight A to severe, 6	Slight to moderate, 6	Slight to moderate, 6	Slight to severe, 6	Moderate to severe, 6, 8	Slight to severe, 6	Slight to moderate, 8	Good Good
		20	0-1	Very poorly	Loamy outwash over sand and gravel	Slight	Slight to severe, 6	Slight A to severe, 6	Slight to moderate, 6	Slight to moderate, 6	Slight to severe, 6	Slight to severe, 6	Slight	Slight	
12	Genesee-Eel-Shoals-Eldean Association 1%	30	0-1	Well	Loamy alluvium	Slight	Severe, 5	Severe, 5	Severe, 5	Severe, 5	Severe, 5	Slight to severe, 5	Severe, 5	Slight	Good Good Good Good
		20	0-1	Moderately well	Loamy alluvium	Slight	Severe, 5	Severe, 5	Severe, 5	Severe, 5	Severe, 5	Slight to severe, 5	Severe, 5	Slight	
		15	0-1	Somewhat poorly	Loamy alluvium	Slight	Severe, 5	Severe, 5	Severe, 5	Severe, 5	Severe, 5	Slight to severe, 5	Severe, 5	Moderate, 5	
		10	0-6	Well	Loamy outwash over sand and gravel	Slight-moderate	Slight	Slight A	Slight	Slight	Slight	Slight	Slight	Slight	
13	Sloan-Latty, overwash Association 1%	40	0-1	Very poorly	Loamy alluvium	Slight	Severe, 5	Severe, 5	Severe, 5	Severe, 5	Severe, 5	Severe, 5	Moderate, 5	Slight	Good Fair
		20	0-1	Very poorly	Clayey alluvium	Slight	Severe, 5	Severe, 5	Severe, 1, 5	Severe, 5	Severe, 5	Severe, 5	Moderate, 5	Slight	

KINDS OF LIMITATIONS

1 - Restricted permeability.

5 - Flooding hazard.

2 - Shrink-swell hazard.

6 - Slopes.

3 - Seasonal wetness.

7 - Clayey subsoil - poor workability.

4 - Possibility of surface ponding.

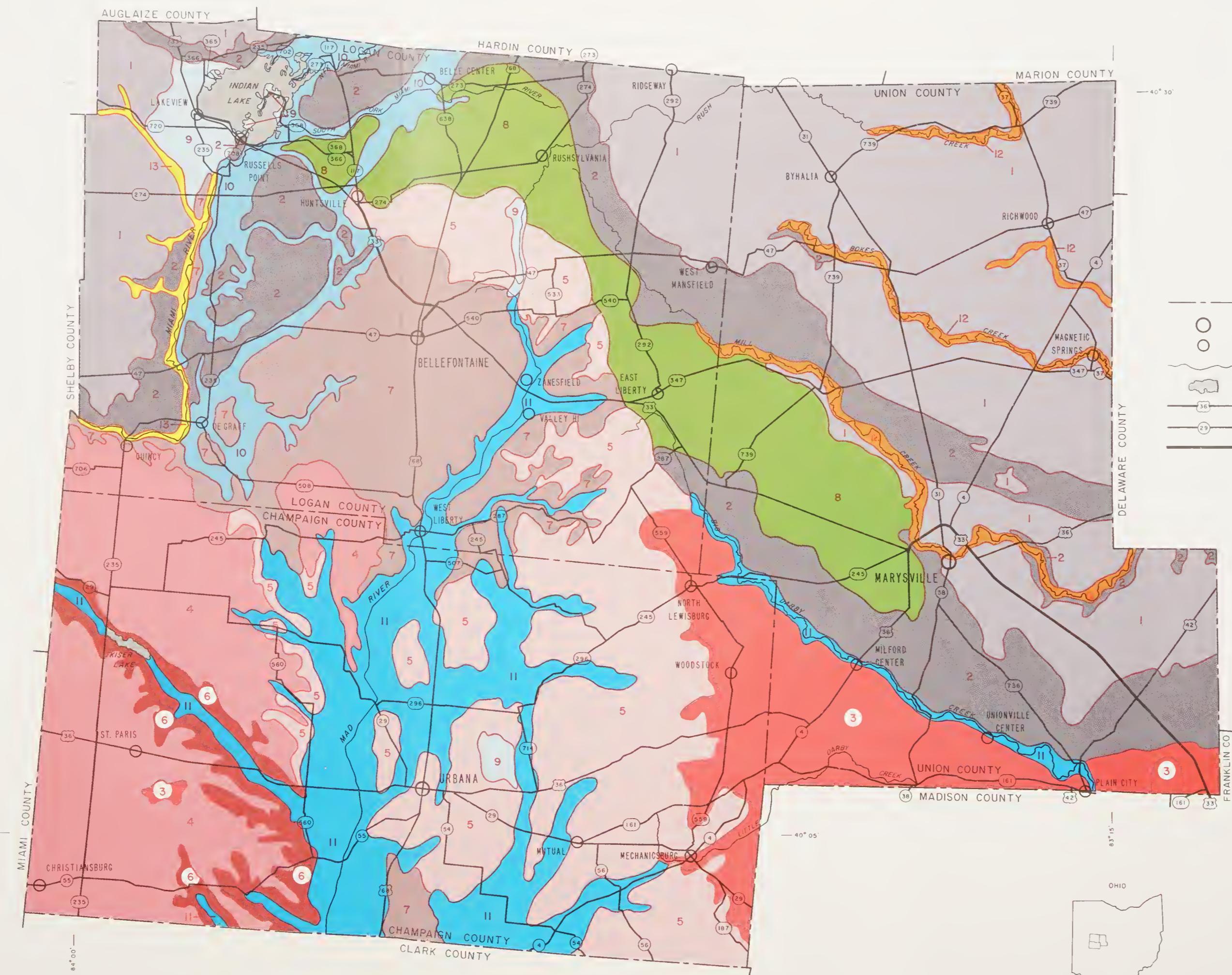
8 - Drought hazard.

FOOTNOTES:

A - Hazard of environmental pollution

B - Minor soils occurring in each association are not shown in Table 1. Therefore, percentages do not total 100%.

SOIL ASSOCIATIONS



GENERAL SOIL MAP TOP OF OHIO RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

CHAMPAIGN, LOGAN, AND UNION COUNTIES, OHIO

Each area outlined on this map consists of more than one kind of soil. The map is thus meant for general planning rather than a basis for decisions on the use of specific tracts.

SOILS TABLE I

MAP SYMBOL	SOIL ASSOCIATIONS AND PERCENT OF PROJECT AREA	PERCENT OF ASSOCIATION B/	PROPERTIES OF THE SOILS					DEGREE AND KINDS OF LIMITATIONS OF SOILS FOR SPECIFIED LAND USES							WOODLAND SUITABILITY		
			PERCENT OF SLOPE	NATURAL SOIL DRAINAGE	PARENT MATERIAL	EROSION HAZARD	LOCAL ROADS AND STREETS	SEPTIC TANK ABSORPTION FIELDS	DWELLINGS WITHOUT BASEMENTS	DWELLINGS WITH BASEMENTS	INTENSIVE USE RECREATION	LANDSCAPING	FARMING (CULTIVATED CROPS)	PASTURE			
1	Blount-Wetzel-Pewamo Association Blount Wetzel Pewamo	21%	65 18 13	0-6 0-1 0-1	Somewhat poorly Very poorly Very poorly	Clay loam glacial till Clay loam glacial till Clay loam glacial till	Moderate Slight Slight	Moderate, 3 Severe, 3 Severe, 3	Severe, 1, 3 Severe, 3, 4 Severe, 3, 4	Moderate, 3 Severe, 3 Severe, 3	Severe, 3 Severe, 3, 4 Severe, 3, 4	Moderate, 3 Severe, 3 Severe, 3	Moderate, 3 Severe, 3 Severe, 3	Slight Slight Slight	Slight Slight Slight	Fair Good Good	
2	Blount-Morley-Pewamo Association Blount Morley Pewamo	13%	50 34 14	0-6 2-18 0-1	Somewhat poorly Moderately well Very poorly	Clay loam glacial till Clay loam glacial till Clay loam glacial till	Moderate Moderate-severe Slight	Moderate, 3 Moderate to severe, 6, 7 Severe, 3	Severe, 1, 3 Severe, 1, 6	Moderate, 3 Slight to moderate, 6	Severe, 3 Severe, 3	Moderate, 3 Slight to severe, 6	Moderate, 3 Severe, 3	Slight Slight	Slight Slight	Fair Good	
3	Brookston-Crosby Association Brookston-Crosby	8%	54 30	0-1 0-6	Very poorly Somewhat poorly	Loam glacial till Loam glacial till	Slight Moderate	Severe, 3 Moderate, 3	Severe, 3, 4 Severe, 3	Severe, 3 Moderate, 3	Severe, 3 Severe, 3	Severe, 3, 4 Moderate, 3	Severe, 3 Moderate, 3	Slight Slight	Slight Slight	Good Fair	
4	Crosby-Brookston-Celina Association Crosby Brookston Celina	10%	50 20 15	0-6 0-2 2-6	Somewhat poorly Very poorly Moderately well	Loam glacial till Loam glacial till Loam glacial till	Moderate Slight Moderate	Moderate, 3 Severe, 3 Moderate, 7	Severe, 3 Severe, 3, 4 Severe, 1	Moderate, 3 Severe, 3 Slight	Severe, 3 Severe, 3 Moderate, 3	Moderate, 3 Severe, 3, 4 Slight	Moderate, 3 Severe, 3 Slight	Slight Slight Slight	Slight Slight Slight	Fair Good Good	
5	Miamian-Celina-Brookston Association Miamian Celina Brookston	17%	50 12 10	6-25 2-6 0-2	Well Moderately well Very poorly	Loam glacial till Loam glacial till Loam glacial till	Moderate-severe Moderate Slight	Moderate to severe, 6, 7 Moderate, 7 Severe, 3	Severe, 1, 6 Severe, 1 Severe, 3, 4	Moderate to severe, 6 Slight Severe, 3	Moderate to severe, 6 Moderate, 3 Severe, 3	Moderate to severe, 6 Severe, 3 Slight	Moderate to severe, 6 Severe, 3 Severe, 3	Moderate to severe, 6 Slight Slight	Slight Slight	Good Good	
6	Miamian Association Miamian	2%	70	18-35	Well	Loam glacial till	Severe	Severe, 6	Severe, 1, 6	Severe, 6	Severe, 6	Severe, 6	Severe, 6	Severe, 6	Slight to moderate, 6	Good	
7	Miamian-Eldean Association Miamian Eldean	5%	40 25	2-25 2-12	Well Well	Loam glacial till Loamy outwash over sand and gravel	Moderate-severe Moderate	Moderate to severe, 6, 7 Slight to moderate, 6	Severe, 1, 6 Slight A to moderate, 6	Slight to severe, 6 Slight to moderate, 6	Slight to severe, 6 Slight to moderate, 6	Slight to severe, 6 Slight to moderate, 6	Slight to severe, 6 Moderate, 8	Slight to severe, 6 Slight to moderate, 6	Slight Slight	Good Good	
8	Nappanee-Paulding-St. Clair Association Nappanee Paulding St. Clair	9%	50 25 20	0-6 0-1 2-12	Somewhat poorly Very poorly Moderately well	Clayey glacial till Clayey deposits Clayey glacial till	Moderate Slight Moderate-severe	Moderate, 3 Severe, 1, 3 Moderate, 6, 7	Severe, 1, 3 Severe, 3, 4 Severe, 1	Moderate, 3 Severe, 3 Slight to moderate, 6	Severe, 3 Severe, 3 Moderate, 3	Moderate, 3 Severe, 3, 4 Slight to moderate, 6	Moderate, 3 Severe, 3 Severe, 3	Moderate, 3 Severe, 3 Slight to moderate, 6	Moderate, 3 Severe, 3 Moderate to severe, 6	Slight Moderate, 3 Slight	Fair Fair Fair
9	Latty-Fulton-Patton Association Latty Fulton Patton	1%	40 20 10	0-1 0-6 0-1	Very poorly Somewhat poorly Very poorly	Clayey lake deposits Clayey lake deposits Silty lake deposits	Slight Moderate Slight	Severe, 3 Moderate, 3 Severe, 3	Severe, 3, 4 Severe, 1 Severe, 3, 4	Severe, 3 Moderate, 3 Severe, 3	Severe, 3 Severe, 3 Severe, 3	Severe, 3, 4 Moderate, 3 Severe, 3, 4	Severe, 3 Moderate, 3 Severe, 3	Moderate, 3 Severe, 3 Slight	Slight Slight Slight	Fair Fair Good	
10	Montgomery-Eldean Association Montgomery Eldean	3%	40 30	0-1 0-18	Very poorly Well	Clayey lake deposits Loamy outwash over sand and gravel	Slight Slight-moderate	Severe, 3 Slight A to severe, 6	Severe, 3, 4 Slight A to severe, 6	Severe, 3 Slight to moderate, 6	Severe, 3 Slight to moderate, 6	Severe, 3, 4 Slight to severe, 6	Severe, 3 Moderate to severe, 6, 8	Moderate, 3 Severe, 3 Slight to severe, 6	Slight Slight to moderate, 8	Fair Good	
11	Eldean-Lippincott Association Eldean Lippincott	9%	50 20	0-18 0-1	Well Very poorly	Loamy outwash over sand and gravel Loamy outwash over sand and gravel	Slight-moderate Slight	Slight A to severe, 6 Severe, 3	Slight A to severe, 6 Severe, 3	Slight to moderate, 6 Severe, 3	Slight to moderate, 6 Severe, 3	Slight to severe, 6 Severe, 3	Moderate to severe, 6, 8 Severe, 3	Slight to severe, 6 Slight	Slight to moderate, 8 Slight	Good Good	
12	Genesee-Eel-Shoals-Eldean Association Genesee Eel Shoals Eldean	1%	30 20 15 10	0-1 0-1 0-1 0-6	Well Moderately well Somewhat poorly Well	Loamy alluvium Loamy alluvium Loamy alluvium Loamy outwash over sand and gravel	Slight Slight Slight Slight-moderate	Severe, 5 Severe, 5 Severe, 5 Slight	Severe, 5 Severe, 5 Severe, 5 Slight A	Severe, 5 Severe, 5 Severe, 5 Slight	Severe, 5 Severe, 5 Severe, 5 Slight	Slight to severe, 5 Slight to severe, 5 Severe, 5 Slight	Severe, 5 Severe, 5 Severe, 5 Slight	Slight Slight Slight Slight	Slight Slight Slight Slight	Good Good Good Good	
13	Sloan-Latty, overwash Association Sloan Latty, overwash	1%	40 20	0-1 0-1	Very poorly Very poorly	Loamy alluvium Clayey alluvium	Slight Slight	Severe, 5 Severe, 5	Severe, 5 Severe, 1, 5	Severe, 5 Severe, 5	Severe, 5 Severe, 5	Severe, 5 Severe, 5	Severe, 3, 5 Severe, 3, 5	Moderate, 5 Moderate, 5	Slight Slight	Good Fair	

KINDS OF LIMITATIONS

1 - Restricted permeability
 2 - Shrink-swell hazard.
 3 - Seasonal wetness.
 4 - Possibility of surface ponding.
 5 - Flooding hazard.
 6 - Slopes.
 7 - Clayey subsoil - poor workability.
 8 - Drought hazard.

FOOTNOTES:

A - Hazard of environmental pollution

B/ - Minor soils occurring in each association are not shown in Table 1. Therefore, percentages do not total 100%.

GEOLOGY

The Top of Ohio area is located in the glaciated area of Ohio. Ice, probably more than a mile in thickness, covered the area for about 10,000 years. When the glacier retreated, it left behind deposits of unstratified clay, silt, sand, and gravel.

In general, the three-county area is covered with gently rolling or flat glacial deposits. The higher elevation areas and the highest point in Ohio are found in eastern Logan County along an island-like eroded bedrock remnant known as the "Bellefontaine Outlier."

Many large boulders were deposited in the area, forming what is known as a "boulder belt." These boulders near the surface affect soil management for many types of land uses. The Boulder Belt map outlines the areas where the boulders are primarily encountered.

As the glacier retreated, channels, tubes, and pits formed in the melting ice, in which ice-borne debris accumulated. Winding, narrow ridges of sand and gravel known as "eskers," and short, high ridges known as "kames" were formed, composed of relatively clean sand and gravel deposits. Streams of water melting from the glacier transported large quantities of ice-borne sand and gravel, depositing these materials in well-sorted layers. These deposits are commonly known as "outwashes." Occasionally, large chunks of ice were left standing in "outwash plains." When these ice chunks melted, small depressions known as "kettles" were formed. Water accumulated in many of these kettles, forming natural lakes.

Sedimentary bedrock underlies the area, although only very occasional outcrops are found in Champaign, Logan, and Union Counties.

The underlying bedrock of the project area is predominantly limestone and dolomite with some shales. It lies essentially horizontal with a very slight dip to the northeast at a rate of about 15 feet per mile.

Groundwater resources are generally abundant throughout the Top of Ohio RC&D area. The limestone and dolomite bedrock is porous with vertical joints and horizontal bedding planes providing fair water yields. Glacial deposits of sand and gravel yield good supplies of groundwater. Potential yields from various underground sources are shown on the Underground Water map, which is based on existing well data. Potential yields range from 5 to 1000 gallons per minute or more, depending upon the water-bearing sources. Areas with poor potential for development of groundwater supplies are shale bedrock and

thick glacial drift, which is generally high in clay content. Supplies from these sources are generally adequate for domestic and low volume uses. Areas with good groundwater potential for development are those underlain by limestone and dolomite bedrock and glacial sand and gravel deposits. The greatest potential for groundwater resource development exists in the sand and gravel deposits adjacent to the Mad River. Yields of more than 1000 gallons per minute may be obtained from these deposits.

In general, water obtained from unconsolidated sand and gravel deposits is of somewhat better quality than that obtained from dolomite sources, although slightly higher in iron concentrations. The most significant groundwater quality problems are due to concentrations of minerals. Treatment of water is often needed for various uses.

Although the area has generally adequate groundwater resources for present needs, and there appears to be good potential for future developmental needs, resource planners must appreciate the relationships between surface and groundwater. Surface water from runoff and streams recharge groundwater some of the time in some areas, and groundwater replenishes surface water some of the time in other areas, especially during periods of drought or low flow. These constant relationships need to be considered when planning water supply, sewage treatment facilities, sanitary landfills, deep well injection of wastes, and other developments that involve water resources. Otherwise, pollution of water may occur.

The most important mineral resources produced in Champaign, Logan, and Union Counties are sand, gravel, and limestone. Approximately 3% of Ohio's sand and gravel production comes from the Top of Ohio area.

The best sources of sand and gravel in Champaign, Logan, and Union Counties are located in the well sorted glaciated sand and gravel deposits found in kames, eskers, and outwashes. Champaign County is the greatest producer of sand and gravel in the Top of Ohio area due to the extensive outwash deposits along the Mad River. Champaign County averaged 81% of the total sand production and 74% of the total gravel production from the three counties from 1969 through 1972. The sand and gravel is utilized in building, paving, and other construction activities.

Limestone is also quarried in this area. Although the stone's quality is not good for the production of dimension stone, the rock is suitable for crushed stone, riprap, concrete and road material, railroad ballast, and chemical products.

No sandstone, coal, gypsum, or salt deposits are found in the area, except salt in sulfur brines at depths below 300 feet. Clay, shale, oil, and gas are present, but no production has been reported in recent years and known deposits are of limited extent. Peat has been mined locally on a small scale.





BOULDER BELT TOP OF OHIO RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

CHAMPAIGN, LOGAN, AND UNION COUNTIES, OHIO

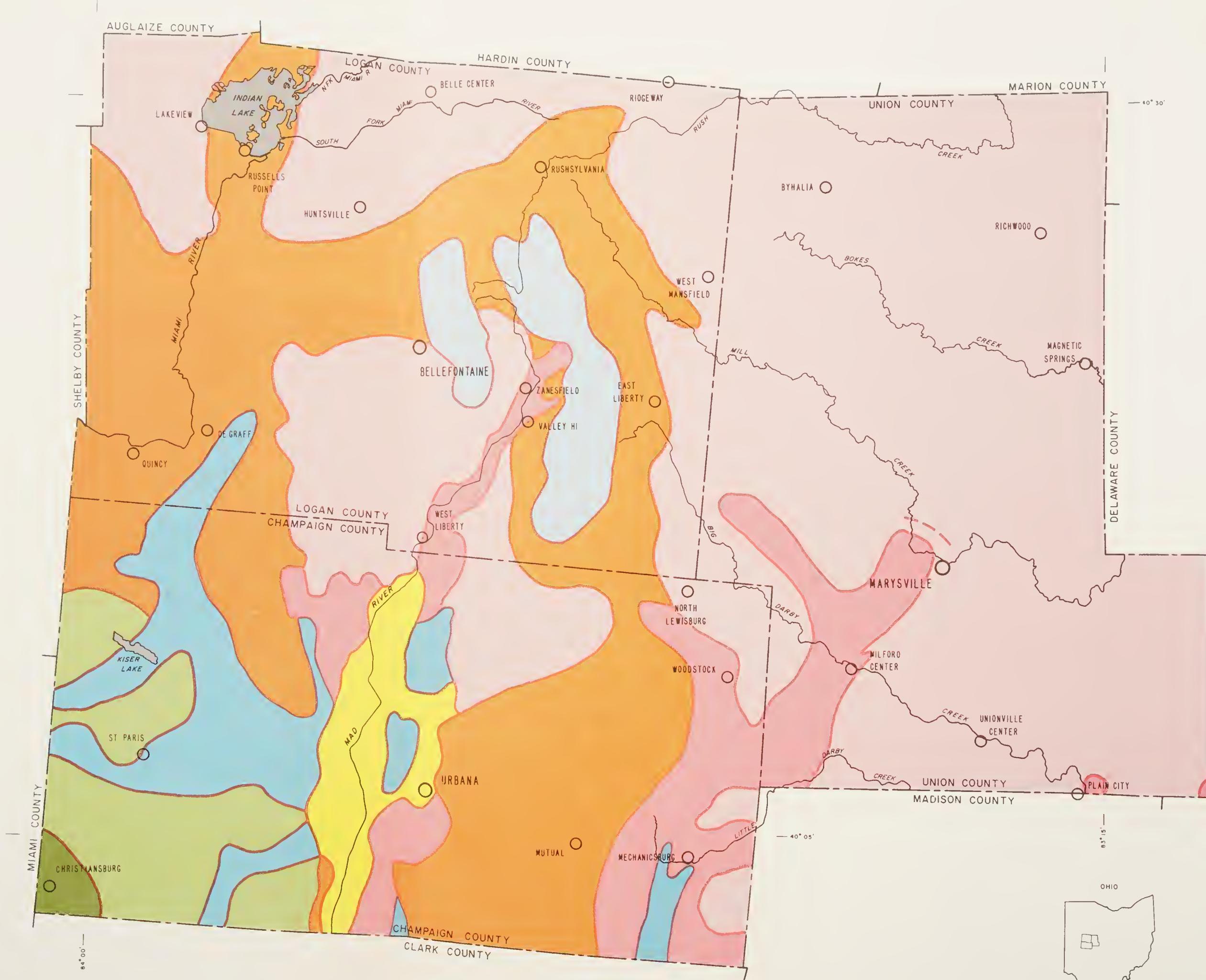
NOVEMBER 1974

SOURCE
SCS FAMILY OF MAPS 5,R-32,479 I (5/74) AND THE OHIO DEPARTMENT OF
NATURAL RESOURCES, DIVISION OF LANDS AND SOILS

POLYCONIC PROJECTIONS

1

SCALE 1 0 1 2 3 4 5 6 7 8 9 10 MIL



UNDERGROUND WATER AVAILABILITY MAP TOP OF OHIO RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

CHAMPAIGN, LOGAN, AND UNION COUNTIES, OHIO

LAND

Land is basic to all major elements of the economy and quality of life in the project area. This basic resource has been subjected to competing uses and these pressures will continue. Land use changes place an additional burden on the remaining agricultural acres to produce more to meet future food needs. Land must be used wisely to fulfill future requirements.

The Top of Ohio RC&D Project has a land area of 855,040 acres, or 1,336 square miles. Approximately 86% of the area is in farms. The farm areas are broken at irregular intervals with cities, villages, rural housing developments, and other land uses. Ownership of lands within the area is predominantly held by private interests with two large and notable exceptions. The State of Ohio owns the Transportation Research Center of Ohio located on 8,100 acres near the center of the project area and Indian Lake covers approximately 5,800 acres in the northwest part of the project area.

Recent and projected changes in land use, technology, income levels and patterns of living are causing adjustment problems in the project area. The area is increasingly faced with land use, education, transportation, and housing problems.

The Logan-Union-Champaign Regional Planning Commission was formed in 1967 and a comprehensive plan has been developed for the region. Approximately two-thirds of the political subdivisions in the region are members of the planning commission.

The task of implementing the plan has just begun. The need to read the "signs" of our environment and properly guide the changing scene grows daily.

PROBLEMS AND NEEDS

The area is faced with numerous problems resulting from previous haphazard growth patterns. The effects have resulted in misuse of natural resources and incompatible land uses.

A general need exists to understand basic soil and water conservation principles and to complete and evaluate inventories of basic natural resources.

Growth patterns have ignored soil capabilities. Conflicts and incompatible land uses are increasing. Additional plans need to be developed according to land capabilities and other natural resource features of the area. Increased use of soil surveys and closer cooperation between the various governmental bodies responsible for planning is needed to accelerate the

understanding and further development of comprehensive land use plans.

Sewage disposal systems have been installed in the past in areas with severe soil limitations. In the rural areas, sewage disposal planning has generally been confined to individual sites. Central sewage treatment plants for subdivisions in rural areas are now coming into existence. Long-range planning for sewage disposal is needed throughout most of the area.

The flood plains have generally been neglected in land use planning. These areas are particularly vulnerable to misuse of the natural resource base. Inventories are inadequate and there is a need for more of the political subdivisions to initiate actions for preserving the flood plains and halt incompatible developments in these areas. A need exists for additional legislation for the rural political governmental subdivisions to fulfill their responsibilities.

Presently, zoning resolutions, subdivision regulations, building codes, and health regulations are in effect in a variety of combinations in the parts of the project area where they have been adopted. Confusion and misunderstanding is widespread.

The popular belief in the "total freedom" of landowners to exercise their options over use of resources has been a strong force encountered in developing and implementing land use plans on a community basis.

Zoning and other land use regulations have seldom recognized land capabilities as a prerequisite in planning. Agriculture, in particular, has received little benefit from previous regulations.

Before zoning and subdivision regulations are more widely accepted, well-developed planning programs involving more people throughout the area are needed if these tools of implementing land uses are to be successful.

PROPOSED ACTIONS AND POSSIBLE SOLUTIONS

The Sponsors and Executive Council of the Top of Ohio RC&D Project have the opportunity to develop increased rapport between all land users, planners, professional and technical people, and government officials at all levels.

Improved efforts are needed to provide citizens with information and understanding concerning land use planning and the means for implementing the plans. Generally the approach requires maximum citizen involvement at the county level with technical assistance from agency representatives familiar with the people and resources. Changes in attitudes toward individual property rights vs. community needs are needed for successful planning and implementation. Coordinated planning and policy guidance on a project-wide basis will be of increasing importance in the development of sound local plans.

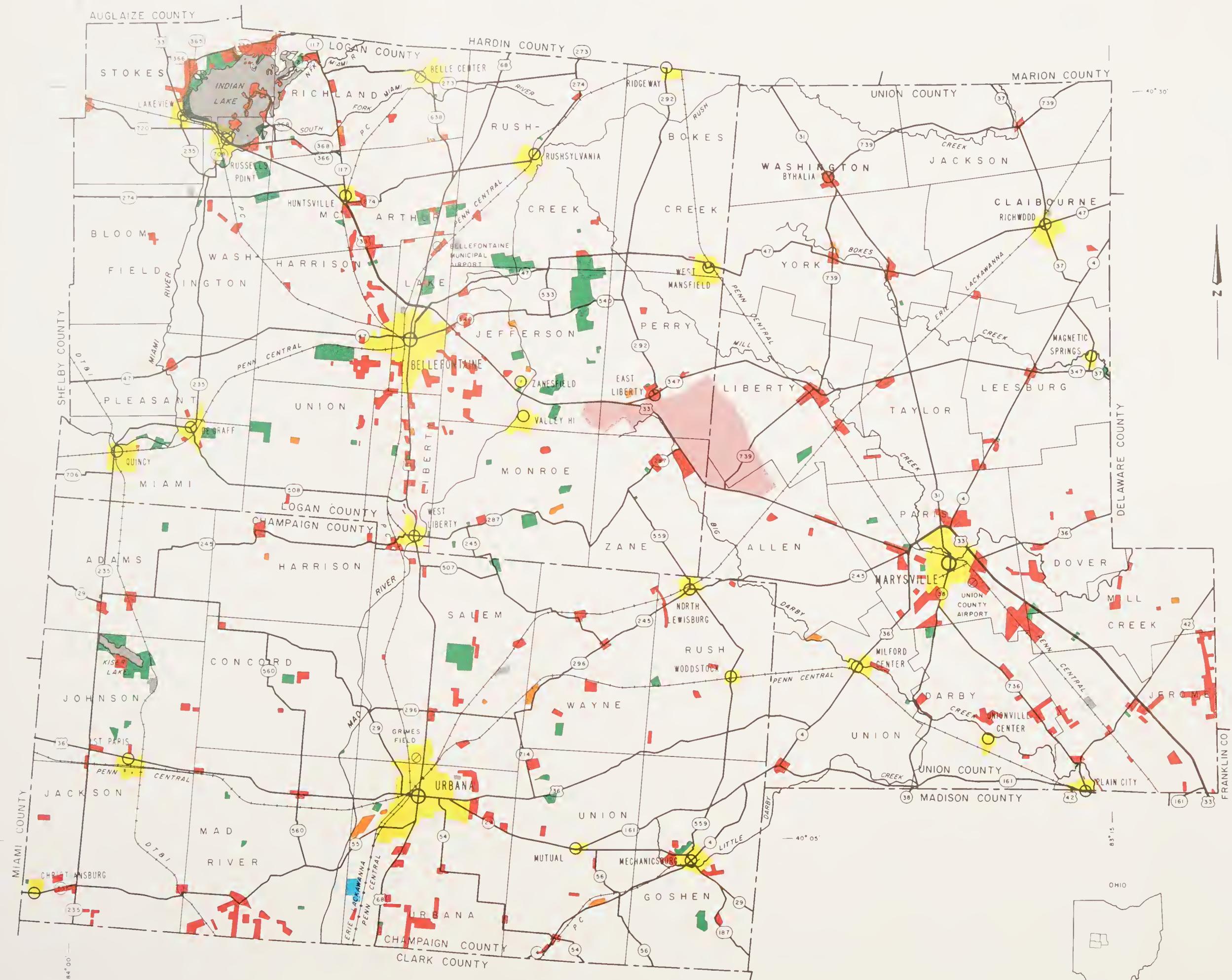
The following factors affecting land use patterns will be considered in RC&D measure plans:

1. Natural capabilities and limitations of land areas.
2. Economic and social needs.
3. Protection needs for all resources including scenic, historic, and unique areas.

TABLE 1
 TOP OF OHIO RC&D AREA
 LAND USE AND CONSERVATION NEEDS INVENTORY
 LAND USE ACRES IN INVENTORY*

	<u>CHAMPAIGN</u>	<u>LOGAN</u>	<u>UNION</u>	<u>PROJECT AREA</u>
I. TOTAL LAND AREA	277,120	300,160	277,760	855,040
Urban & Built-up	17,119	14,709	20,620	52,448
Small Water Areas	393	856	86	1,335
Cropland	196,000	190,669	202,498	589,167
Pasture	23,239	41,174	27,180	91,593
Forest	32,804	30,495	18,638	81,937
Other Land	7,509	17,084	8,738	33,331
II. CONSERVATION TREATMENT NEEDS				
A. CROPLAND IN TILLAGE ROTATION				
Treatment Adequate	82,021	46,863	90,083	218,967
Residue & Annual Cover	32,675	16,437	17,124	66,236
Sod in Rotation	12,660	18,020	12,620	43,300
Contouring Only	1,505	649	6,657	8,811
Strip Cropping, Terraces, Diversions	4,448	22,925	766	28,139
Permanent Cover	4,604	216	191	5,011
Drainage	57,422	85,209	74,882	217,513
B. FOREST				
Treatment Adequate	6,280	6,100	6,411	18,791
Establishment and Reinforcement	5,920	6,100	2,007	14,027
Timber Stand Improve- ment	20,604	18,295	10,220	49,119
Forest Grazed	15,737	13,625	582	29,944
C. PASTURE				
Treatment Adequate	4,086	9,813	11,455	25,354
No Treatment Feasible	350	433	194	977
Change in Land Use	0	3,028	194	3,222
Total Needing Treatment	18,803	27,900	15,337	62,040
Total Needing Improve- ment	15,765	12,976	14,173	42,914
Total Needing Re- establishment	818	4,326	388	5,532

*Ohio Soil and Water Conservation Needs Inventory, 1971



**EXISTING LAND USE MAP
TOP OF OHIO
RESOURCE CONSERVATION AND
DEVELOPMENT PROJECT**

CHAMPAIGN, LOGAN, AND UNION COUNTIES, OHIO

NOVEMBER 1974

1/300,000

SCALE 1 0 1 2 3 4 5 6 7 8 9 10 MILES



WATER

The Top of Ohio RC&D Project area has a north-south drainage divide that establishes nearly equal-sized drainage areas flowing east and south to the Scioto River and west and south to the Miami River. These rivers flow south into the Ohio River and the project area is located near the upper reaches of both rivers. Except in northwestern Logan County, very little surface water flows into the project area from adjoining counties.

Due to the strategic location of the project area upstream from nearby metropolitan areas, water uses and quality not only affect the economy and way of life locally, but that of nearby areas in adjoining counties.

Vast glacial gravel deposits exist in many parts of Logan and Champaign Counties. Artesian water flows are common and have pronounced effects on surface waters. Union County surface waters do not have this characteristic. The Mad River Valley is one of Ohio's major underground water resources.

Indian Lake in northwestern Logan County is the largest body of surface water in the project area with approximately 5,800 acres of area. In 1856 this natural lake area underwent extensive man-made changes and served for the next 40 years as a canal feeder lake. Since then the Indian Lake Region has been extensively changed further by man and is a water-based recreation area attracting people from throughout Ohio and adjoining states.

Kiser Lake (374 acres) and Muzzy's Lake (115 acres) in Champaign County are the only other bodies of surface water over 100 acres in size. At least 13 other lakes in the area are over 10 acres in size.

The quality of surface water is generally considered hard. Calcium carbonate in excess of 200 parts per million and total dissolved solids in excess of 1000 parts per million are common. Treatment is desirable for domestic purposes.

PROBLEMS AND NEEDS

Extensive annual flooding has not been a common, widespread occurrence throughout the project area. The Mad River Valley and the Indian Lake Region have suffered the most extensive flooding damages. However, the potential for increased flood losses is mounting due to man-made developments in the flood plains. Flood hazard areas have not been adequately delineated to obtain basic information for developing land use, drainage, and regulatory plans in the flood plains.

Ponding of water in low lying areas, poor surface drainage, and inadequate drainage outlets are widespread concerns both in agricultural and urban areas.

Sediment and domestic waste water are considered the most extensive water pollutants at this time. Historically, the sediment has come from farm lands, rural roads, and streambank erosion. Increasing amounts of sediment are now moving from urban developments. The expansion of waste water treatment facilities and construction of new ones is a recognized need for reducing pollutants and upgrading water quality. In the past five years several communities have constructed or improved facilities. Other communities need technical and financial assistance.

Concentrations of livestock feeding operations, and increased uses of commercial fertilizers and various chemicals in agricultural operations are suspect as agents for lowering surface water quality in the area.

Essentially all domestic, municipal, and industrial water supplies are obtained from wells. The area generally has adequate water supplies from underground sources, based on present uses. However, a number of areas do not have underground supplies capable of supporting heavy water using industries and large urban areas without augmenting the supplies from other sources.

Ground water with hardness in excess of 150 parts per million generally requires treatment according to standards established by the U. S. Public Health Service and the Ohio Department of Natural Resources. The hardness of most ground water in the Top of Ohio Project area has 275-690 parts per million.

Ponds have been constructed throughout the area to augment livestock watering needs, but wells continue to supply the majority of livestock and other agricultural needs. Caution is advisable in planning water retention sites due to gravelly soils and possible leakage, especially in many parts of Champaign and Logan Counties.

Clear underground waters entering drainage channels create ideal growing conditions for watercress in widespread areas of Champaign and Logan Counties. Watercress growth is clogging many drainage facilities and creating high maintenance costs.

Existing water-based recreational facilities are more concentrated in Logan County. Union County and eastern Champaign County have very few available for public use. The Mad River is the outstanding trout fishing stream in Ohio due to the cool underground waters supplying the stream. This versatile stream

and valley, with many potentials, demand enlightened planning decisions.

The East Fork Buck Creek watershed project covering 6,570 acres in southeastern Champaign County is the only P.L. 566 Small Watershed and Flood Protection project installed to date in the Top of Ohio area.

Applications for technical and financial assistance through the P.L. 566 program have been locally sponsored for Mad River, Muddy-Glady Creeks, and Tawawa Creek involving areas in Champaign and Logan Counties. To date, satisfactory solutions have not been achieved.

Gravel deposited by moving water in streams creates severe drainage and flooding problems. Silt deposits clogging drainage facilities are common throughout the project area.

The Southwest Ohio Water Plan, including the Miami River Basin portion of the project area, and the Central Ohio Water Plan, including the Scioto River Basin portion, have not been developed to the point of supplying adequate information and guidelines for planning and managing the water resources in the Top of Ohio Project area.

PROPOSED ACTIONS AND POSSIBLE SOLUTIONS

Historically, water supplies have generally been adequate for the needs within the project area. As growth continues in both the rural and urban areas, water will be subjected to more diverse interests, pressures, and conflicts. Water management problems will increase and demand attention. The need for long-range water resource planning is evident to meet the needs of agriculture, industry, recreation, and domestic users.

Information is not available for planning all phases of water development. Stream monitoring stations should be established to better understand water quality. Contamination of ground water supplies needs better identification.

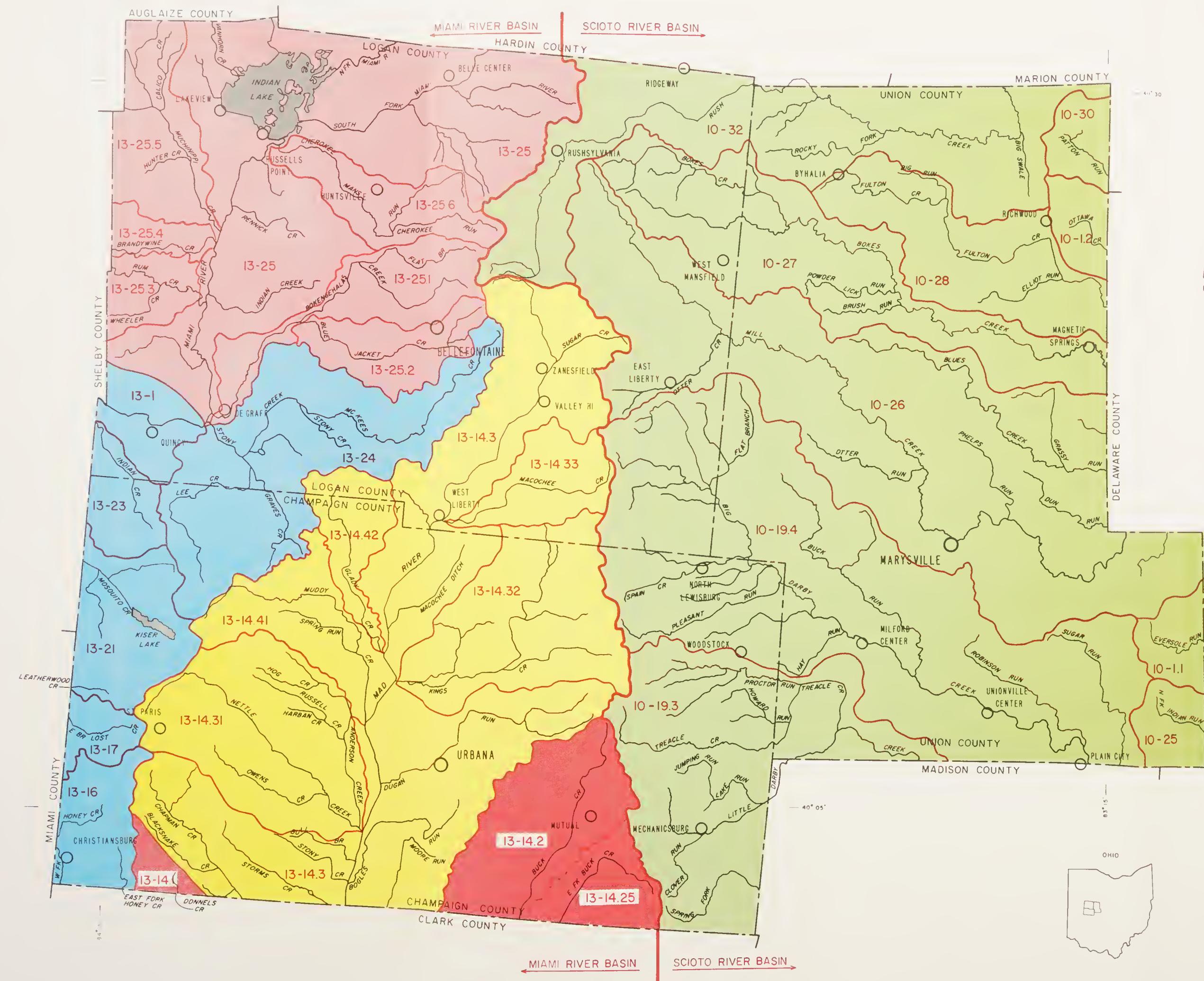
Assistance from the Ohio Department of Natural Resources, U. S. Soil Conservation Service, U. S. Department of Housing and Urban Development and others will be used in developing plans for flood plains.

Inventories of water resources will provide needed basic potentials. The Bureau of Outdoor Recreation, Land and Water Conservation Funds, RC&D water-based recreation funds, Farmers Home Administration RC&D loans, and other sources can be utilized in completing projects that have wide community benefits.

A number of sources of assistance are available for technical and financial assistance in applying water development projects. These sources should be investigated and used where these programs and RC&D sponsors' objectives can attain mutual goals.

Community actions will enhance efforts to provide clean streams that meet diversified needs and provide beauty of the environment.

Accelerated conservation land treatment programs will be instrumental in providing for the protection and development of water resources.



WATERSHED MAP TOP OF OHIO RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

CHAMPAIGN, LOGAN, AND UNION COUNTIES, OHIO

DECEMBER 1974

VERSOLE RUN
OTTAWA CREEK
LITTLE DARBY CREEK
G DARBY CREEK
ORTH FORK INDIAN CREEK

0-26 MILL CREEK
0-27 BOKES CREEK
0-28 FULTON CREEK
0-30 PATTON RUN
0-32 RUSH CREEK

MIAMI
GREAT MIAMI RIVER
GREAT MIAMI RIVER
LOCAL DRAINAGE
ONEY CREEK
OST CREEK
AWAWA CREEK
DIAN CREEK

MAD RIVER
3-141
3-142
-1425
DONNELS CREEK
BUCK CREEK
EAST FORK BUCK CREEK

UPPER MIAMI RIVER
OKENGEHALAS CREEK
BLUE JACKET CREEK
UM CREEK
RANDYWINE CREEK
UCHINIPPI CREEK
HEROKEE MANS CREEK

- UPPER MAD RIVER
- * NETTLE CREEK
- * KINGS CREEK
- * MACOCHEE CREEK
- MUDGY CREEK
- GLADY CREEK

CONSERVATION NEEDS INVENTORY SUBWATERSHEDS

SOURCE
S.C.S FAMILY OF MAPS 5,R-32,479 (5/74), CONSERVATION NEEDS INVENTORY
WORKSHEETS, 1967 AND U.S.G.S. TOPOGRAPHIC MAPS

POLYCONIC PROJECTION

USDA SCS LINCOLN NEBR 1975

SCALE 1 0 1 2 3 4 5 6 7 8 9 10 MI

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5, P-34,690

AGRICULTURE

Agriculture provides vital support for the economy and life of the Top of Ohio Project area. Approximately 86% of the land area is devoted to agriculture. Planning for the agricultural future and the wise use of the needed natural resources is a prime concern in the area.

Corn, soybeans, wheat, oats and hay are major crops produced. Dairy products, cattle, hogs, sheep, and poultry play major roles in the diversified agricultural economy. To lesser extents, other field crops, livestock, fruits, and vegetables contribute to the agricultural production.

Although employment on the farm has decreased significantly and is expected to further decline, the productiveness of those remaining employed on the farm is expected to increase and remain a major factor in the local economy. In 1973, farming cash receipts totaled \$107,854,000* in comparison to total retail sales of \$249,775,000** in the project area.

According to the 1969 Agriculture Census approximately 60% of the farmers worked off the farm at least part-time. The same census places the average age of farmers at 49 years old. The farm tenancy rate is approximately 15% in the project area.

Agriculture Tables 1, 2, 3, 4, and 5 provide insights into the magnitude, trends, and diversification of the agriculture industry in the area.

Individual efforts, local, state, and national organizations have all contributed to the strength of the agriculture industry. Ongoing assistance programs in cooperation with local, state, and federal agencies contribute information, research, training, technical, and financial assistance for the needs of agriculture.

Soil and water conservation districts were organized in each county during the 1943-45 period. On July 1, 1974 these districts had 2,657 landowners with 438,365 acres of land using technical assistance for planning and applying conservation programs. This acreage represents about 51% of the total land area in the project.

The soil and water conservation districts are expanding their programs to provide services to the urban and non-agricultural interests of the project area. Agriculture is expected to share the benefits of coordinated programs for managing natural resources on a total community basis.

PROBLEMS AND NEEDS

In recent years the acreage used for agriculture has increased slightly in the Top of Ohio area. This trend is expected to reverse in the future due to an increasing use of land for non-agricultural purposes. Due to the close proximity of the Top of Ohio area to nearby metropolitan areas, pressures for land resources are expected to increase more rapidly.

Urban expansion and random developments are converting lands from agriculture permanently. Land use problems are created by the mixing of residential housing scattered throughout the agricultural areas.

Housing, commercial, industrial, recreational, and public facility developments are all showing increases and competing with agriculture for the use of land.

Confusion, fear, emotionalism and other difficulties have confronted planning progress for selecting proper land uses, including the preservation of agricultural lands. To date, comprehensive planning within the area has been directed primarily toward urban developments.

Agriculture and adjoining land uses are increasingly confronted with incompatible conflicts of land use. Soil movement, drainage, and odors are the main points of contention to date.

Land use planning for conservation treatment is widely needed in all three counties. Conservation treatment planning is a prerequisite for the successful application of a soil and water conservation program, regardless of the land use. Plans based on available natural resources, economic considerations and desires of landowners have been developed by approximately 2,000 landowners for 342,000 acres of land in cooperation with their soil and water conservation districts. An additional 650 landowners with 98,000 acres, are in the process of developing plans and installing conservation measures in cooperation with the districts. The Soil Conservation Service and others assist the districts and landowners with the technical phases of the conservation planning and treatment.

The Land Use and Conservation Needs Inventory Table 1 points out the need for conservation treatment of agricultural lands.

Erosion caused by water movement is a major problem on approximately 26% of the sloping agricultural lands. A major portion of the soils in the area are high in clay content. Clay particles moved by water stay in suspension for long periods of time and contribute significantly to filling drainage channels.

In some parts of the project area large amounts of sand and gravel are eroded by water and deposited in watercourses. The Mad River and its tributaries are seriously affected by these sand and gravel deposits. Abuse of land resources by man contributes to this problem, but the topography and natural capabilities of the soils and plant life provide difficult management factors. Adequate inventories are lacking for developing a broad-based plan for these areas. Technical assistance is needed for engineering, agronomy, biology, and maintenance planning.

Agricultural chemicals move with soil particles and can contribute to stream pollution. The extent of the problem is mostly conjecture at this time. Stream monitoring facilities are inadequate in numbers for gathering facts and information.

Inadequately treated sloping cropland needs such practices as conservation cropping systems, contour farming, crop residue management, minimum tillage practices, grassed waterways, tile, diversion terraces, or a combination of these practices to reduce soil erosion.

Approximately 35% of the cropland in the area needs drainage treatment. Adequate drainage systems are a necessity over large sections in the three counties for productive agriculture to survive. Many conservation land treatments are hampered by inadequate drainage systems. Tile, field surface drainage systems, outlet channel improvements and increased maintenance are widespread needs.

Vegetative growth is clogging many drainage channels. Clogging by watercress is particularly troublesome in many Champaign and Logan County drainage channels. Adequate control techniques for watercress are needed for the benefit of agricultural drainage.

Increased cooperation between landowners and governmental officials is needed for improving the effectiveness of drainage maintenance programs.

Pasture and hay production are below the potential on many farms in the area, both in quality and quantity. According to the 1967 Conservation Needs Inventory, 65% of the pastureland is in need of conservation treatments. Due to changed land uses and economic considerations, pasture inventories need updating.

The need for renovation and application of management practices are the primary conservation treatments needed. The abandonment of land for pasture and encroachments by brush are increasing. Land use conversions need to be considered. More conservation plans tailored to the resources of each operating farm unit are needed.

The project area has the advantage of proximity to several terminal marketing facilities in the general region. However, increased agricultural production is highlighting the need for improvements in the storage, transportation, and marketing of agricultural products.

Many rural roads have inadequate bridges to carry larger equipment and heavier loads. The railroad industry has plans to discontinue servicing several rural marketing and storage facilities in the area.

The enforcement of Clean Air Standards is expanding dilemmas for local marketing facilities with grain dryers. Present equipment at these facilities does not meet the standards. Some local facilities are expected to terminate operations due to lack of finances for installing additional storage facilities and pollution abatement equipment. Fuel allocations for drying equipment at farm, local, and regional facilities are an increasing concern.

The project area is experiencing two shortages that are hampering conservation land treatments and agricultural production. More conservation contractors are needed, especially for drainage improvements. Many farmers are experiencing problems in obtaining agricultural limestone for their lands. Most of the agricultural limestone is trucked into the project area from adjoining counties. Stone processors and truckers are not supplying the needs.

Inadequate financing for needed agriculture production is holding back the plans of many farmers in the area. To meet the demands for increased production, special efforts and innovations by producers and lenders are needed.

PROPOSED ACTIONS AND POSSIBLE SOLUTIONS

Inventories are needed for studying alternatives and developing broad plans for the needs of agriculture. The number and types of inventories to be completed can be cooperatively planned by citizens, agri-business, local governmental units, and assisting agencies and commissions.

Many individuals, businesses, organizations, and agencies in the area have the expertise and resources to assist with the development and preservation of the agricultural resources of the area. Improved cooperation and understanding can widen the future effectiveness for the benefit of agriculture.

Increased cooperative efforts in providing conservation treatments can effectively preserve land resources for agriculture. Higher agricultural production can be achieved by implementing improved water management and drainage improvement

systems. Sedimentation of the lakes and watercourses can be reduced by applying needed land treatment measures.

Improved designs of pollution abatement facilities for confined livestock operations can provide means to improve water quality and minimize conflicts with non-agricultural interests. Additional means for financing these facilities will more effectively meet the needs of expanding the program in the project area.

A more stable economy in regards to livestock enterprises can be realized by more efficient selection of the type of individual livestock enterprises, improved management systems, land use conversions, and fuller use of lands selected for grass and legume production.

Increased proficiency and profits can be realized through improved transportation and marketing facilities and procedures.

Research activities can be addressed to the needs of grain handling management. Cross utilization of drying and storage facilities offer possibilities of spreading their high costs more uniformly throughout the year for multi-purposes.

More effective and efficient uses of resources such as capital and labor, in addition to natural resources, can be attained by expanding information, education, and training program efforts.

SOURCE: *Ohio Farm Income, O.A.R.D.C. 9/74
 **Ohio Bureau of Employment Services 10/15/74

AGRICULTURE TABLE 1

TOP OF OHIO RC&D AREA
F FARMS, ACREAGE, SIZE

COUNTY	YEAR	NO. OF FARMS	ACREAGE IN FARMS	AVERAGE SIZE	% OF LAND IN FARMS
CHAMPAIGN	1969	1366	249,853	182.9	90.3
	1964	1286	245,115	190.6	88.4
	1959	1529	245,110	160.3	88.4
LOGAN	1969	1471	244,799	166.4	83.1
	1964	1552	243,865	157.1	81.2
	1959	1694	243,869	144.0	81.2
UNION	1969	1444	247,500	171.3	89.1
	1964	1450	245,005	169.0	88.2
	1959	1646	245,009	148.9	88.2

SOURCE: U. S. Census of Agriculture 1969, 1964

AGRICULTURE TABLE 2

TOP OF OHIO RC&D AREA
CASH RECEIPTS FROM FARMING BY COUNTIES, OHIO, 1973

COUNTY	CASH RECEIPTS FROM FARMING			GOVERN- MENT PAY- MENTS			AVERAGE		
	FARM MARKETINGS			TOTAL CASH RECEIPTS			PER FARM ACRE		
	LIVESTOCK & LIVESTOCK PRODUCTS	CROPS	TOTAL	MENTS	MENTS	RECEIPTS	DOLLARS	DOLLARS	DOLLARS
THOUSAND DOLLARS									
CHAMPAIGN	19,542	21,868	41,410	1,117	42,527		29,128	166	
LOGAN	16,402	17,918	34,320	776	35,096		23,089	140	
UNION	14,566	17,558	32,124	902	33,026		21,445	129	
RC&D AREA	50,510	57,344	107,854	2,795	110,649		24,554	145	

SOURCE: Ohio Farm Income, Ohio Agricultural Research & Development Center,
September 1974.

AGRICULTURE TABLE 3

TOP OF OHIO RC&D AREA
 RANK OF EIGHT MAJOR FARM COMMODITIES BY RELATIVE IMPORTANCE
 1973

	CHAMPAIGN CO.	LOGAN CO.	UNION CO.	RC&D AREA				
RANK	COMMODITY	%	COMMODITY	%	COMMODITY	%	COMMODITY	%
1	SOYBEANS	24	SOYBEANS	26	SOYBEANS	36	SOYBEANS	28
2	CORN	23	DAIRY	23	DAIRY	14	CORN	19
3	DAIRY	18	CORN	20	CATTLE	14	DAIRY	18
4	CATTLE	16	CATTLE	15	CORN	14	CATTLE	15
5	HOGS	10	HOGS	8	HOGS	13	HOGS	11
6	WHEAT	3	WHEAT	3	WHEAT	3	WHEAT	3
7	POULTRY	2	SHEEP	1	POULTRY	2	POULTRY	2
8	POTATOES	2	POULTRY	1	SHEEP	1	OATS & HAY	1
	ALL OTHER	2	ALL OTHER	3	ALL OTHER	3	ALL OTHER	3

SALES RECEIPTS:

\$41,410,000 \$34,320,000 \$32,124,000 \$107,854,000

SOURCE: Ohio Farm Income, Ohio Agricultural Research & Development Center, September 1974

AGRICULTURE TABLE 4

TOP OF OHIO RC&D AREA
ACREAGE, YIELD & PRODUCTION, OHIO, 1972-1973

County & District :	Acres 1972 :	Acres harvested 1973 :	Yield 1972 :	Yield 1973 :	Production 1972 :	Production 1973 :
<u>CORN:</u>						
Champaign	66,100	67,700	101	83	6,676,000	5,619,000
Logan	51,600	54,700	89	76	4,592,000	4,157,000
Union	49,900	53,100	89	78	4,441,000	4,142,000
<u>SOYBEANS:</u>						
Champaign	42,200	54,700	27.0	30.5	1,139,000	1,668,000
Logan	62,500	66,500	25.5	23.0	1,594,000	1,530,000
Union	70,200	78,200	25.0	25.5	1,755,000	1,994,000
<u>WHEAT:</u>						
Champaign	16,700	11,700	49.0	34.0	818,000	398,000
Logan	14,500	9,100	47.0	32.0	681,000	291,000
Union	13,700	9,700	46.0	32.0	630,000	310,000
<u>OATS:</u>						
Champaign	5,000	8,000	68	50	340,000	400,000
Logan	6,500	9,100	56	46	364,000	419,000
Union	5,200	8,300	55	48	286,000	398,000
<u>HAY:</u>						
Champaign	21,200	22,300	2.50	2.30	53,000	51,300
Logan	24,800	22,600	2.40	2.30	59,500	52,000
Union	16,400	16,800	2.25	2.20	36,900	37,000

AGRICULTURE TABLE 5

ALL CATTLE & MILK COWS - Number on farms, January 1, 1973-1974
TOP OF OHIO RC&D AREA

County & District	All cattle and calves	Milk cows and heifers that have calved	
		Jan. 1, 1973	Jan. 1, 1974
Champaign	44,200	44,500	10,800
Logan	34,000	34,200	9,900
Union	28,200	27,900	6,500

HOGS AND PIGS, DECEMBER 1, STOCK SHEEP, JANUARY 1, - Number on farms, Ohio

County & District	Hogs and pigs	Stock Sheep	
		Dec. 1, 1972	Jan. 1, 1973
Champaign	41,100	41,500	9,500
Logan	24,200	24,500	13,800
Union	44,500	43,900	13,200

SOURCE: 1973 United States Department of Agriculture Statistical
Reporting Service

FORESTRY

Prior to 1800 the Top of Ohio area was covered by dense forests with lakes and prairie areas sprinkled across the landscape. Maple, oak, beech, and hickory were the dominant tree species.

Today approximately 9% of the area remains in forest and very little of this remaining forest land has the dense and productive growth of former years. The natural potential remains but the decisions and actions of man continue steady inroads by reducing the forest resources. The variety of soils and climate provide a situation where many tree species are well adapted to the project area.

The 1971 Conservation Needs Inventory of Ohio revealed Champaign County had 32,804 acres, Logan County 30,495 acres, and Union County 18,638 acres of forests. Nearly all of the acreage is in small and private ownerships.

Forest industry employment has steadily declined in the area and parallels the dwindling forest resources. Today only one sawmill operates full time and four others operate part time.

There is a strong demand to use woodlands for recreation and housing locations.

In general, the Top of Ohio forestry resources have been neglected or exploited with little regard for the future.

PROBLEMS AND NEEDS

Few woodlands are managed to produce the maximum benefits available from them. Accelerated management programs are needed to help realize full potential from the forest resources. Many landowners are not aware of the assistance that is available to them. Many do not realize the value of woodlands to themselves and their communities.

Up-to-date woodland inventories are needed for a better understanding of existing conditions and for planning the future.

Existing technical assistance for forestry is understaffed. There is a need for additional assistance to service requests of individual woodland managers and to assist communities and organizations.

According to the 1971 Conservation Needs Inventory 14,000 acres of the area need tree planting. This includes reinforcement plantings in areas that are producing below their potential because of inadequate stocking.

An additional 49,000 acres of woodland need timber stand improvements to increase quality and growth rates of the forest stands.

Grazing elimination is needed on 29,944 acres of the area according to the Conservation Needs Inventory.

Most tree planting and timber stand improvement has been done by individual landowners. The volume of accomplishments is too small to meet total needs. There is a need to develop more comprehensive tree planting and timber improvement programs utilizing contractors and needed equipment. Adequate technical supervision is needed for these programs.

The maple syrup industry is declining in the area. There is a need to revitalize and promote the syrup industry.

There is a need to expand environmental education programs with teachers and students. There is a need for more and better utilized outdoor land laboratories.

A large percentage of the local forestry employment is composed of men approaching retirement age. The Occupational Safety and Health Act is hastening decisions to retire. Younger people are not being attracted to the industry.

There is a need for custom cutting and processing facilities to meet local needs.

The woodlands of the project area contain a large volume of low quality timber. Distance and lack of local facilities to process available volumes of low quality timber provide a poor marketing situation.

There is a need to give forestry a more prominent consideration in land use planning on individual properties and in comprehensive land use plans for communities. Marginal cropland and urban forestry need particular attention in land use planning.

There is a need to revise the tax structure for woodlands and increase awareness and participation under existing tax laws.

Many landowners have had unsatisfactory experiences with loggers. Cutting of immature trees, damage to residual stands, and unethical financial practices are common complaints.

PROPOSED ACTIONS AND POSSIBLE SOLUTIONS

Improved forestry management practices can lead to increased quality timber production. The small private woodlands will be the key source of wood fiber in the area.

Increased quality and quantity lead to more local processing industries and local forest industry employment. The use of soils information, tree planting, timber stand improvements, fire control, and protection from livestock, insects, and diseases will be encouraged.

The protection and maintenance of young timber stands with high quality species that are in high demand will be encouraged. Premature harvests will be discouraged in these stands.

The increased use of tree windbreaks will be encouraged throughout the area both for individual homesteads and communities.

Improved forestry management can combine increased production, markets, and employment with improved use of watersheds, increased wildlife production, improved aesthetics, and more comprehensive programs to meet the demands of recreation and urban areas.

The early completion of adequate inventories in rural and urban areas will be instrumental in developing plans of action to meet the various needs for additional technical assistance, comprehensive tree planting and timber stand improvements, manpower training, revitalization of the maple syrup industry, land laboratories, recreation, and urban forestry.

Increased personal contact is the primary method of obtaining more participation in forest management. These contacts include individual landowners, teachers and students, the forest industries, community officials, the tourism industry, and related users of the forest resources. Additional professional assistance, increased agency cooperation, and an expanded local information program can help unite and expand participation.

Land laboratories and demonstration areas increase the understanding and use of forestry resources. Study and research areas geared to specific needs of the forestry programs will enlarge local information. Tree planting and weed control, timber stand improvement, proper harvesting techniques, recreation uses, urban forestry, and maple syrup study areas are the priority needs to consider first in the Top of Ohio area.

Tax burdens of local landowners can be relieved by more participation in existing forest tax law programs.

WILDLIFE

The wildlife of the Top of Ohio area is influenced by the sub-humid climate and the availability of food, water, and cover. Man has a direct influence in providing the quality environment needed for wildlife.

Wildlife resources are an integral part of the total well-being and economic conditions of the project area. Hunting, fishing, birdwatching, and other outdoor activities generate increased economic activity.

The area provides habitat for a variety of game and non-game fish, birds, and mammals. Most wildlife species are non-game. Song and insect eating birds are numerous and representative of the non-game species. They contribute to the economy and enjoyment of the outdoor community and play vital roles in ecological balance.

Agriculture and other open land uses cover over 90% of the total land area. Wildlife is an important product of these lands, even though most of the land is not primarily managed for wildlife production.

Wildlife is closely associated with the agricultural areas. Quails, mourning doves, songbirds, ring-neck pheasants, cotton-tail rabbits, muskrats, foxes, skunks, raccoons, opossums, and squirrels are common representatives of this group.

White-tailed deer are the only big game species harvested in the area. Despite the enjoyment they provide to many people, their eating habits are damaging crop production, particularly in areas of the project where the landscape has considerable woodland.

The project area is not located along a major waterfowl flyway. The Indian Lake area does attract waterfowl in sizeable numbers and Black and Mallard ducks frequent the Mad River valley during migration.

Indian Lake and Kiser Lake owe much of their popularity to warm water fishing, while the Mad River offers cold water fishing. These facilities attract users from throughout Ohio and adjoining states.

The area has several facilities for fishing open only to membership. A few fishing and hunting facilities are operated commercially.

PROBLEMS AND NEEDS

Increased competition for land will lead to reduced wildlife production. Planning considerations for wildlife are generally lacking in community-wide planning activities. Planning considerations are needed to preserve the wildlife resources.

The effects of chemicals on wildlife are suspect, but additional research and study is needed to understand these effects.

There is a need to reduce sediment, livestock, municipal, and industrial wastes from polluting the streams and lakes.

Most sportsmen respect private and public properties. A few so-called sportsmen do not. Existing law enforcement agencies are hard pressed to locate and bring many violators to adequate justice, even though officers arrest about 230 violators each year in the three-county area.

Landowners and sportsmen relationships are jeopardized by abuses to property, lack of appreciation for landowner viewpoints, non-compliance with wildlife regulations, and failure to contact landowners prior to hunting and fishing on their lands. Expanded efforts are needed for improving relationships.

Liability laws are misunderstood by both the landowners and sportsmen. Sportsmen organizations and law enforcement agencies need increased cooperation.

There is a need for more public hunting area, particularly in Union County.

Existing methods of financing the needs of wildlife conservation programs are inadequate.

Existing fishing waters are in need of better management, access routes and agreements. A unified public relations program is the primary need for fishing streams where the cooperative fishing easements are in existence.

Many unwise land uses are incompatible with soil capabilities. These same unwise decisions are also incompatible for wildlife habitat.

Increased emphasis is needed for planning agricultural and other open lands with wildlife considered as one of the multiple uses.

If landowners are expected to increase wildlife production through expenditures of their funds and resources, improved methods are needed for these landowners to realize economic returns.

PROPOSED ACTIONS AND POSSIBLE SOLUTIONS

Informational and educational programs hold the promise of providing the first steps for a better understanding and appreciation of the needs of wildlife conservation.

Informing schools about conservation needs and techniques offers the opportunity for RC&D committees, soil and water conservation districts, and other organizations to expand the effectiveness of their programs.

Short training courses for landowners, organizations and others interested in wildlife management will also increase understanding.

Recognition of performances by persons and organizations in behalf of wildlife helps other citizens to appreciate the vital role of wildlife in our everyday surroundings.

A higher degree of consideration by hunters and fishermen for landowners offers the opportunity for wildlife to reap many benefits. Increased consideration for fences, crops, livestock, and litter abatement must be encouraged before landowners are willing to increase wildlife efforts for the benefit of others. Reimbursement for sporting privileges should be evaluated for future wildlife planning. Leasing arrangements and user fees should be included in this planning.

Potentials exist for utilizing improved designs and construction techniques in future floodwater and drainage projects.

Shifting land uses to stabilize soil losses and improved tillage and cultural practices will benefit wildlife.

The basic needs of wildlife should be considered in comprehensive land use plans. These basic needs are food, water, and cover.

RECREATION AND TOURISM

The potentials are very good for developing the natural resources of the Top of Ohio area for recreational and tourism purposes.

The area has a number of resources that are favorable for fulfilling recreation needs of local residents and expanding the tourism trade for the benefit of the local economy. These include natural beauty of the area, water resources, varied topography, historic heritage, proximity to urban areas and a climate with variety.

The area has a rich historical Indian heritage. The natural resource attractions were instrumental in attracting Indian tribes to the area.

The same natural attractions plus more recent man-made developments are increasingly drawing people to the area. People today have more time, energy, and disposable income for activities they desire for an improved quality of living. Expanded recreation and tourism developments in the area can provide the recreation needs and attract more dollars into the local economy.

Logan County presently has more developed recreation facilities than Champaign or Union County. Indian Lake in northwestern Logan County is the central feature for a heavily developed area of public and private recreation facilities and closely associated businesses.

The rolling topography and wooded areas in parts of the project area have attracted the location of several organizational camps and private and commercial recreation facilities.

The Mad River with its cold water fishing is an unique asset to the Top of Ohio area. Warm water fishing, colorful woodlands, historic sites, nearby caverns, and scenic roads contribute to the versatile attractiveness of the area for local citizens and tourists.

PROBLEMS AND NEEDS

Planning and protecting these varied resources is needed to prevent damage and destruction, if the recreation and tourism potentials are to be realized.

There is a need for local leadership to further coordinate organization and efforts by joint actions before the recreation and tourism potentials can be realized.

Local committees need to join others with similar interests to broaden their effectiveness.

Special coordination is needed to interest tourists in spending additional time in the area.

Efforts are needed to avoid conflicting dates for local activities and to develop a general theme for promoting festivals and similar activities.

Comprehensive recreation inventories are needed in the area to better determine what facilities are now available and what facilities are lacking both in quantity and quality. These inventories are needed for developing long-range recreation plans to meet future needs.

There is a need to develop a stronger line of communications between private enterprises, local committees, organizations, governmental agencies, and local officials.

Most of the unincorporated areas have no local governmental programs operating to meet recreation needs. There is a need to establish county or metropolitan park boards.

Coordination with the existing recreation departments is needed as an assist for area-wide planning and implementation of recreation developments. Long-range plans are needed that complement each other.

Larger numbers of rural housing developments are expected in several parts of the project area. Future recreation needs for the increased populations associated with these housing developments is receiving little or no attention. This lack of planning will lead to conflicts and costly outlays in the future.

Water-based recreation facilities are generally lacking throughout Union County and the eastern parts of Champaign and Logan Counties. Many local residents are going to other areas to use this type of recreation facility.

Historic and scenic areas are not adequately identified, promoted, protected and maintained. There is a need to attract more awareness and pride by local citizens in these sites.

There is a need to more fully develop and enforce litter abatement programs throughout the area. In particular litter and trespass programs need attention in areas where the cooperative fishing easements create a major recreation activity.

More trails are needed for hiking, bicycling, horseback riding, trail bikes, and snowmobiles.

More roadside rest areas along state highways are needed.

Existing municipal recreation facilities are in need of improvements at most of the facilities. Additional financial and technical assistance is needed for upgrading many of the facilities.

Private recreational developments operated on a commercial basis are faced with inadequate financing arrangements for long-term planning.

Private recreational developments are in need of a more equitable taxing base than presently exists in accordance with the laws of the State of Ohio.

There is a need to develop, with local citizens, a better appreciation of the value of the recreation and tourism potentials as a strong contributor to the local economy.

PROPOSED ACTIONS AND POSSIBLE SOLUTIONS

Many citizens, organizations, and agencies have common interests in recreation and tourism. They should join forces to help plan and develop the numerous recreation potentials of the RC&D project area.

Recreation interests have the opportunity to join in developing comprehensive natural resource plans for the area. Coordinated efforts with non-recreational interests will better serve the needs of recreation in comprehensive planning for the area.

Recreation interests also have the opportunity to actively participate in pollution abatement programs.

Potentials exist to more actively provide for and use older citizens and handicapped persons in recreation activities. This includes providing more facilities for their use and using their talents in developing programs.

The formation of county or metropolitan park boards would enable many more citizens of the area to gain benefits of technical and financial programs that are now bypassing the area. These boards can provide coordination for recreation developments.

Future railroad abandonments present potentials for developing recreation trails.

Sound economic data and recreation facility inventories will provide a basis for developing guidelines in long-range

planning. Identification, protection, and promotion of historic sites will provide added pride by local citizens and attract tourist dollars.

Developing additional outdoor recreation facilities in the smaller communities of the area will supply facilities in closer proximity to many local users.

Improved roadside appearances and locations in cooperation with the various highway departments will enhance the beauty and safety needed throughout the project area.

The uses and attractions of public land areas can be improved by developing a plan for complementing facilities for each area.

Available technical and financial assistance programs will be more fully utilized for developing and promoting all recreation resources.

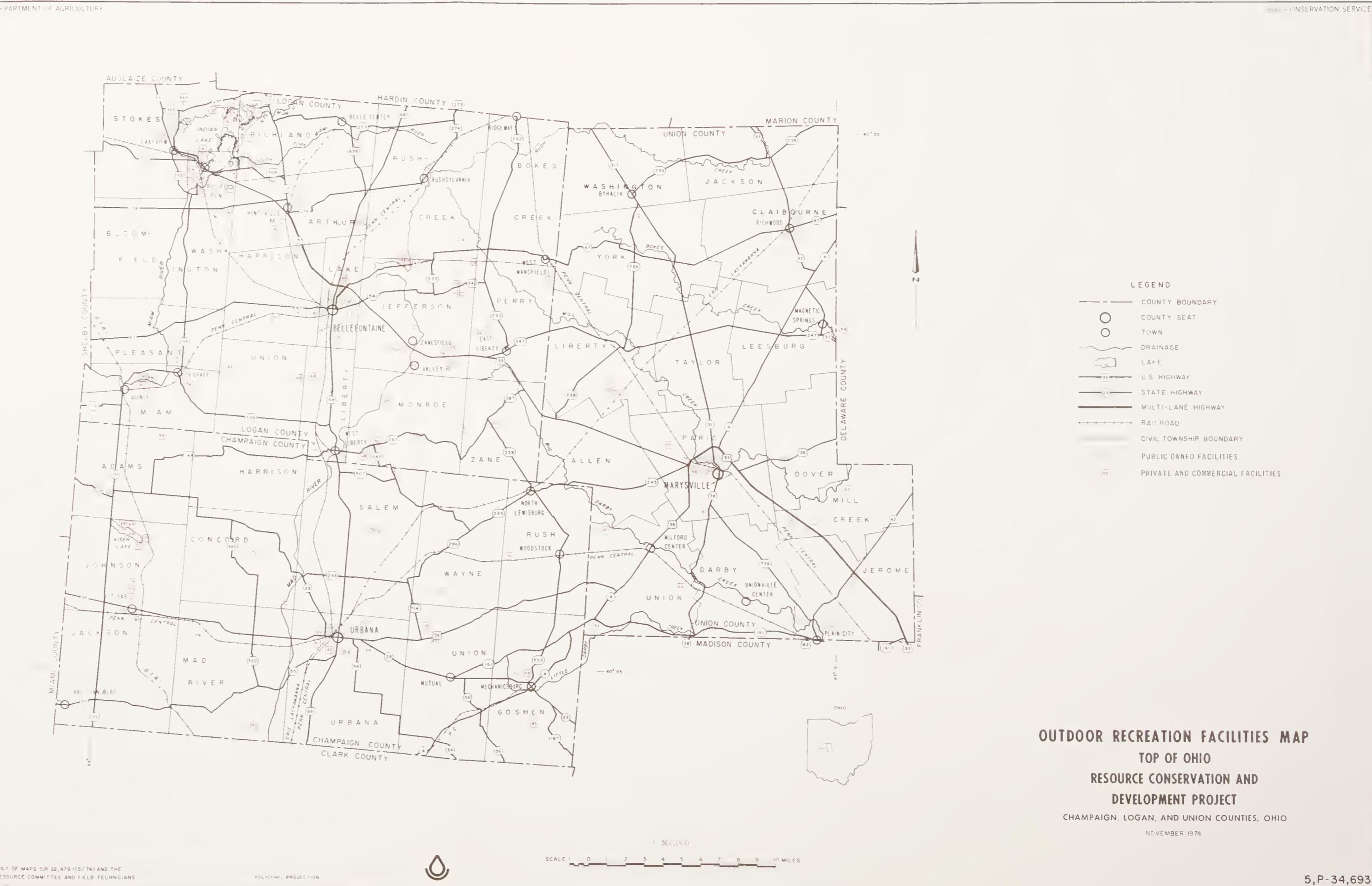


OUTDOOR RECREATION FACILITIES PUBLIC OWNED

<u>MAP #</u>	<u>IDENTITY OF AREA</u>	<u>MAP #</u>	<u>IDENTITY OF AREA</u>
1	Chippewa State Park	45	Urbana Wildlife Area
2	Black Hawk State Park	46	Christiansburg Park
3	Indian Lake State Park	47	Harmon Park
4	Fox Island State Park	48	Mitchell Field
5	Moundwood State Park	49	Glenn Street Park
6	Huntsville Community Park	50	Gwynne Street Park
7	Roadside Rest U.S. 33	51	Johnson Park
8	Roadside Rest U.S. 33	52	Urbana Municipal Park
9	Roadside Rest U.S. 68	53	Champaign Co. Fairgrounds
10	Myrtle Park	54	Roadside Rest - Urbana
11	Powell Park	55	Goshen Park
12	Blair Park		* not developed
13	Brown Park		
14	Rutan Park		
15	Roadside Rest - Bellefontaine		
16	Civic Park		
17	Harmon Field Park		
17A	John Martin Park		
18	Iron City Park		
19	Robinson Field		
20	Logan County Fairgrounds		
21	East Liberty Civic Park		
22	Quincy Village Park		
23	DeGraff Community Park		
24	Roadside Rest U.S. 68		
25	West Liberty Park		
26	Roadside Rest S.R. 245*		
27	Middleburg Ball Park		
28	Richwood Lake Park		
29	Richwood Fairgrounds		
30	Richwood Community Pool*		
31	Roadside Rest S.R. 31		
32	Marysville Municipal Pool		
33	Schwartzkopf Park		
34	Union County Fairgrounds		
35	Ray Lewis Memorial Park		
36	Dover Twp. Community Park		
37	Roadside Rest U.S. 33		
38	Roadside Rest U.S. 33		
39	Roadside Rest S.R. 4		
40	Roadside Rest S.R. 736		
41	Plain City Fairgrounds		
42	Plain City Pool		
43	Roadside Rest S.R. 235		
44	Kiser Lake State Park		

OUTDOOR RECREATION FACILITIES PRIVATE AND COMMERCIAL

MAP #	IDENTITY OF AREA
1	Phillips Happy Hollow - Camp
2	Black Hawk Landing
3	Barnes Landing
4	Turkey Foot Landing
5	Acheson's Resort
6	Long Island Golf Club
7	O'Connor's Landing
8	Indian Lake Yacht Club
9	Indian Lake Playland Park
10	B & B Range - Golf
11	Hickory Woods Family Camp
12	Indian Lake Fish & Game Club
13	Miami Canoe Livery - River
14	Indian Lake Pheasant Farm
15	Welcome Woods Trailer Park
16	Old Mill Camp Ground
17	Valley Dale Riding Academy
18	Rushsylvania Rough Riders Club
19	Cherokee Hills Golf Course
20	Alken Lakes - Camping
21	Camp Wesley - Church
21A	Trans Sippi - Dog Trials
22	Logan Co. Fish & Game Club
23	Logan Par 3 - Golf
24	Camp Co-Tu-Bic - Church
25	Mountain Lake - Camping
26	Mac-o-Chee Girl Scout Camp
27	West Mansfield Conservation Club
28	Camp Myeerah - Girl Scouts
29	Zane Caverns
30	William Smith Club - Fishing
31	YMCA Camp Alfred L. Willson
32	Kamp-A-Lott - Camping
33	Zanesfield Rod & Gun Club
34	Marmon Valley Farm - Youth Camp
35	Kirkmont Christian Educ. Ctr.
36	Windy Acres - Farm Vacation
37	Lone Pine Farm - Vacations
38	Oakdale Camp
39	Camp Riverside
40	Miami Valley Camp
41	Rollicking Hills - Youth Camp
42	Stony Creek Farm - Fish & Hunt
43	Oak Crest Camp Ground
44	Bellefontaine Country Club
45	Camp Cobecac - Church
46	Valley Hi Ski Resort
47	Slaty Hollow Trout Club
48	Castle Piatt Mac-A-Cheek
49	Mac-O-Chee Castle
50	Boy Scout Camp Trabert
51	Prall's Camp Grounds
52	559 Swimming Pool
53	Union Co. Holiness Church Camp
54	Camp Christian - Church
54A	Keckley Rural Life Center Inc.
55	Hickory Haven Fishing Club
56	Heart of Ohio Fish & Game Assoc.
57	American Legion Park - City
58	Scout Camp Rad-O-Wood
59	Marysville Tennis Club
60	Lincoln Lake - Fishing
61	Marysville Country Club
62	Scottslawn Recreation Park
63	Wesleyan Holiness Church Camp
64	Darby Valley Conservation Club
65	Carriage Hill Farm - Horses
66	Shady Bowl Speedway
67	Ohio Caverns
68	Kiser Lake Sailing Club
69	Shepards' Boat Landing
70	Campfire Girls Camp Shawano
71	Kiser Lake Sportsmen's Club & Kiser Lake Saddle Club
72	Meadow Lake Beach Club
73	Champaign Co. Sportsmen's Club
74	Brush Lake, Inc. - Fishing
75	Lakeland Golf Course
75A	M & R Golf Driving Range
76	Boy Scout Camp Shawnee
77	Woodland Golf Course
78	Thornhill Skeet Club
79	Steinberger Recreational Area
80	Lakewood Beach
81	Muzzy's Lake Fishing Club
82	Urbana College - Sports
83	Urbana Country Club
84	Van Darby Sportsmen's Club
85	Potter Recreation Park



SPONSORSHIP

As sponsors of the Top of Ohio Resource Conservation and Development Project, we hereby approve this plan for action.

The program conducted will be in compliance with all requirements respecting nondiscrimination as contained in the Civil Rights Act of 1964 and the regulations of the Secretary of Agriculture (7 C.F.R. Sec. 15.1-15.12), which provide that no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any activity receiving federal financial assistance.

WITNESS THE SIGNATURES OF THE UNDERSIGNED SPONSORING ORGANIZATIONS:

BOARD OF COUNTY COMMISSIONERS
OF CHAMPAIGN COUNTY, OHIO

By: Robert Ward Chairman
Date: April 28, 1975

This action authorized at an official meeting of the Board of County Commissioners of Champaign County on April 28, 1975 at Urbana, Ohio.

Attest: Jerry L. Lehman Clerk

CHAMPAIGN SOIL AND WATER
CONSERVATION DISTRICT

By: John R. Lamm Chairman
Date: April 28, 1975

This action authorized at an official meeting of the Champaign Soil & Water Conservation District on April 28, 1975 at Urbana, Ohio.

Attest: Max Sibley Secretary

BOARD OF COUNTY COMMISSIONERS
OF LOGAN COUNTY, OHIO

By: Warren W. Smith Chairman
Date: April 28, 1975

This action authorized at an official meeting of the Board of County Commissioners of Logan County on April 28, 1975 at Bellefontaine, Ohio.

Attest: Anna C. Tuckey Clerk

LOGAN SOIL AND WATER
CONSERVATION DISTRICT

By: Willis M. Explos Chairman
Date: April 28, 1975

This action authorized at an official meeting of the Logan Soil & Water Conservation District on April 28, 1975 at Bellefontaine, Ohio.

Attest: Heribert J. Bialoy Secretary

BOARD OF COUNTY COMMISSIONERS
OF UNION COUNTY, OHIO

By: Max E. Robinson Chairman
Date: April 28, 1975

This action authorized at an official meeting of the Board of County Commissioners of Union County on April 28, 1975 at Marysville, Ohio.

Attest: Franklin D. Garrett Clerk
acting

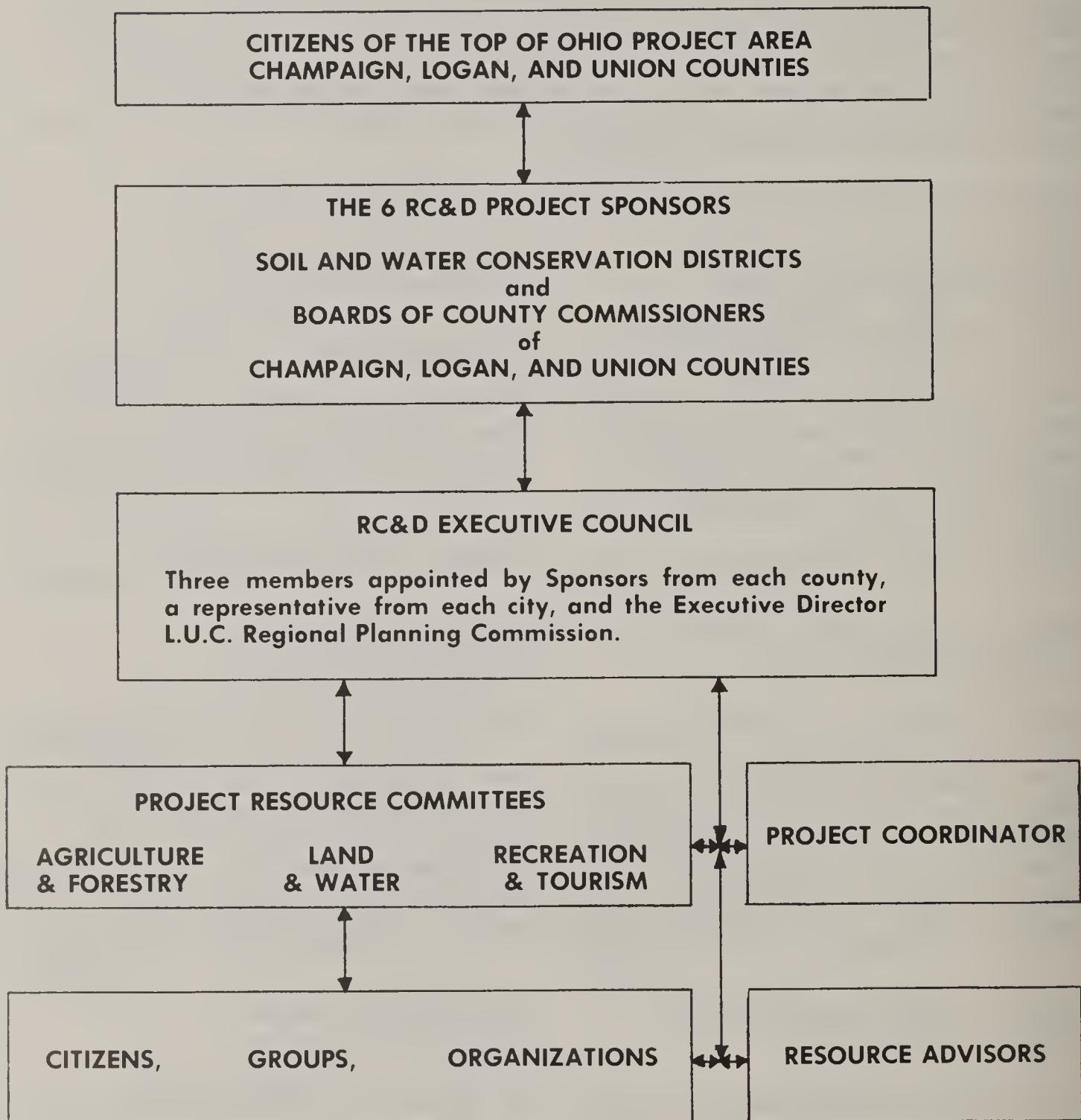
UNION SOIL AND WATER
CONSERVATION DISTRICT

By: James C. Mitchell Chairman
Date: April 28, 1975

This action authorized at an official meeting of the Union Soil & Water Conservation District on 4-28-75 at Marysville, Ohio.

Attest: Clarence Durban Secretary

ORGANIZATION FOR PROJECT PLANNING AND PROJECT OPERATIONS TOP OF OHIO RC&D PROJECT





James A. Rhodes Robert W. Teater
Governor *Director*

Director's Office

FOUNTAIN SQUARE • COLUMBUS, OHIO 43224 • (614) 466-3770

January 31, 1975

Mr. J. Harris Tate
Chairman, Executive Council
Top of Ohio RC&D Project
Box 259
East Liberty, Ohio 43319

Dear Mr. Tate:

Governor Rhodes has asked me to respond to your letter of January 16, 1975 concerning the Project Plan for the Top of Ohio Resource Conservation and Development Project in Champaign, Logan, and Union Counties.

You and your association are to be congratulated upon the initiative and hard work that you are doing to implement an action program on the local level to help citizens help themselves.

The major objectives of the Top of Ohio Resource Conservation and Development Project, to achieve the orderly adjustment and development of land use for present and future needs by local people making the decisions, is certainly commendable.

I was particularly pleased with the aggressive effort that is being made to plan and to implement the development and use of our natural resources. You are commended for giving primary attention to the long range development of the land, water, agriculture, forestry, wildlife, recreation, and tourism in Champaign, Logan, and Union Counties. The Top of Ohio RC&D Project is truly a plan for the future.

The Ohio Department of Natural Resources, Economic and Community Development, and Department of Transportation and other Departments have technically trained personnel to assist where possible. Do not hesitate to request our assistance as you implement your plan.

We wish you every success in accomplishing your objectives.

Sincerely,

A handwritten signature in black ink that reads "Robert W. Teater".

ROBERT W. TEATER
DIRECTOR

RWT/wjd

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